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THE AMERICAN ELEVATOR AND GRAIN TRADE

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PUBLISHED BY
Mitchell Brothers Publishing Co.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

One Dollar Per Annum
SINGLE COPIES, 15 CENTS

VOL. XLIV

431 South Dearborn Street, Chicago, Ill., May 15, 1926

NO. 11

Of Course

We want your business but we want it on a basis that will pay you as well as ourselves. We want it because we have proper facilities for handling it.

Don't be satisfied with slow returns or poor service; send your shipments to

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GRAIN

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CAPACITY { 200 Lbs. Coal
2 1/2 Bushels Grain

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PRICE: \$15.00 F. O. B. cars at factory

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We specialize in steel for grain elevator construction work.

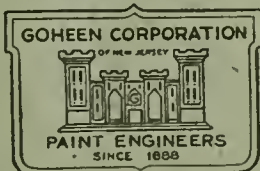
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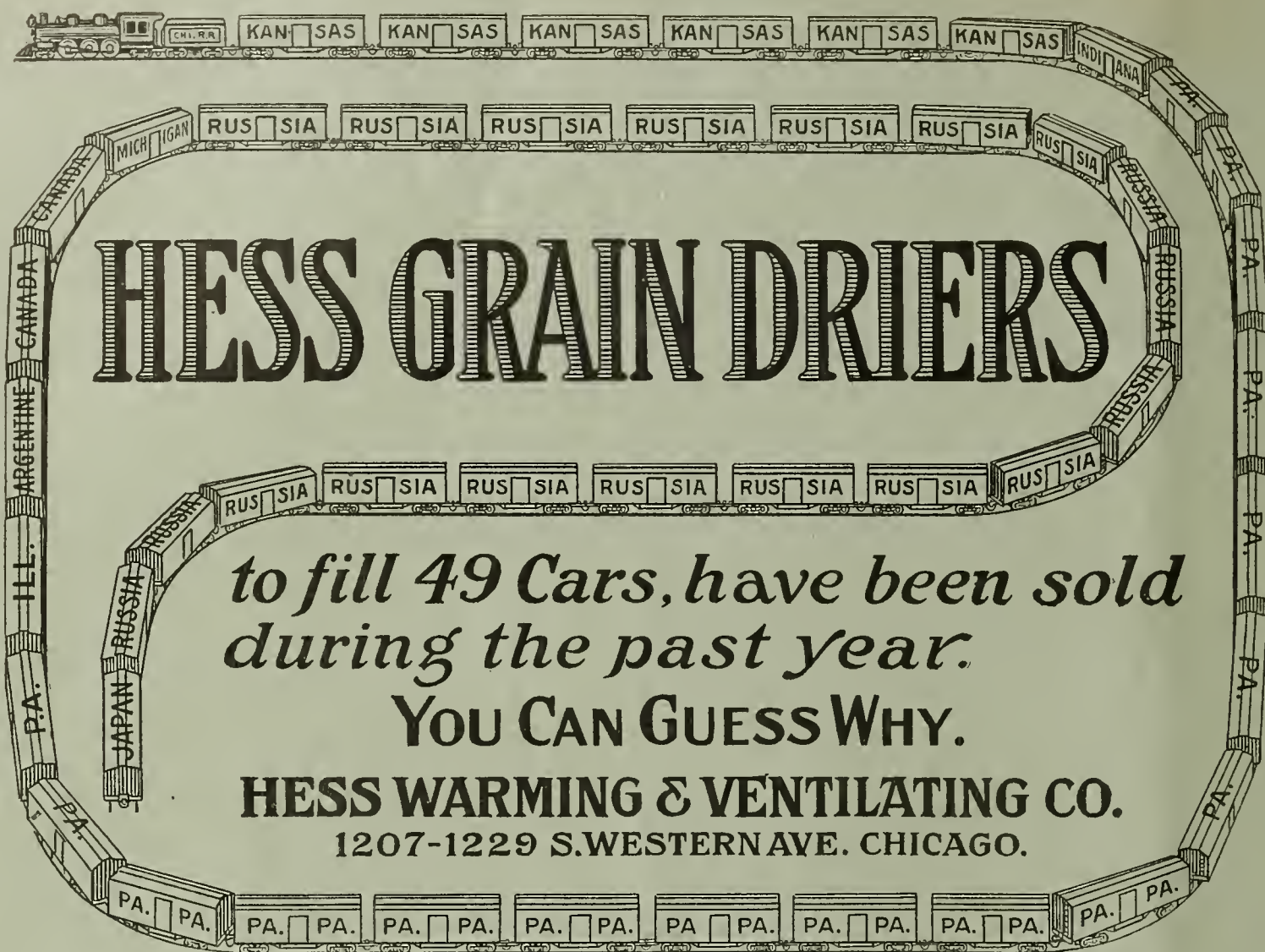
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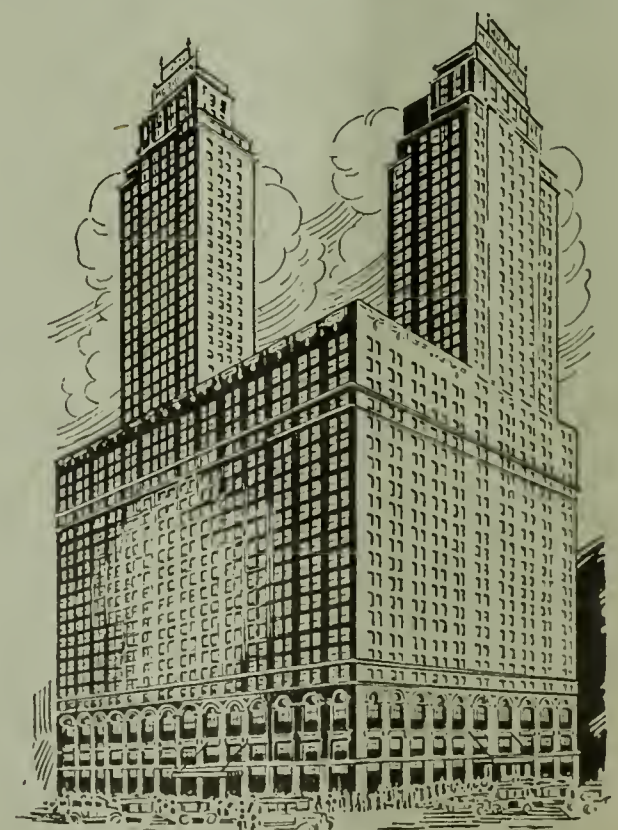
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ALL rooms are outside, each with bath, running ice water, bed-head lamp, and Servidor. A housekeeper is stationed on each floor. All guests enjoy garage service. The famous Terrace Garden entertainments are broadcast daily from WSWS.

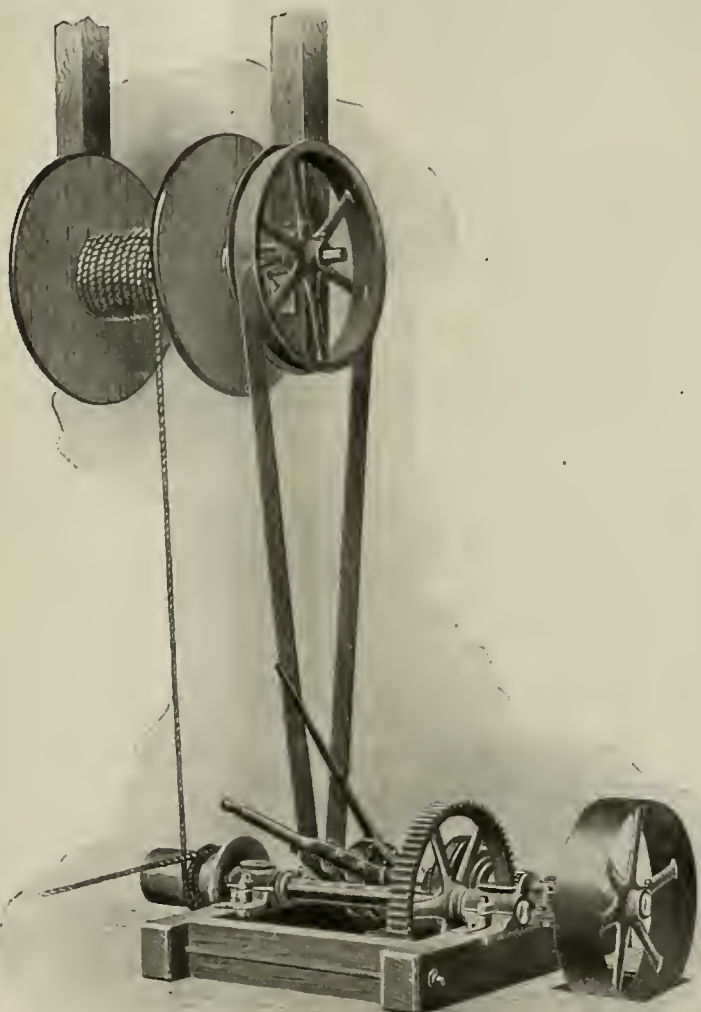
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Nordyke & Marmon Company

POWER CAR PULLER



For convenience in spotting empty cars and moving single or trains of loaded cars, the Nordyke & Marmon Company Spur Gear Car Puller, pictured above, will be found most useful and dependable.

It is built in three sizes ranging in capacity from one to twenty loaded cars on level track, and is supplied either with or without rope winding spool and attachments. Plain jaw or friction clutch release on drive shaft is optional.

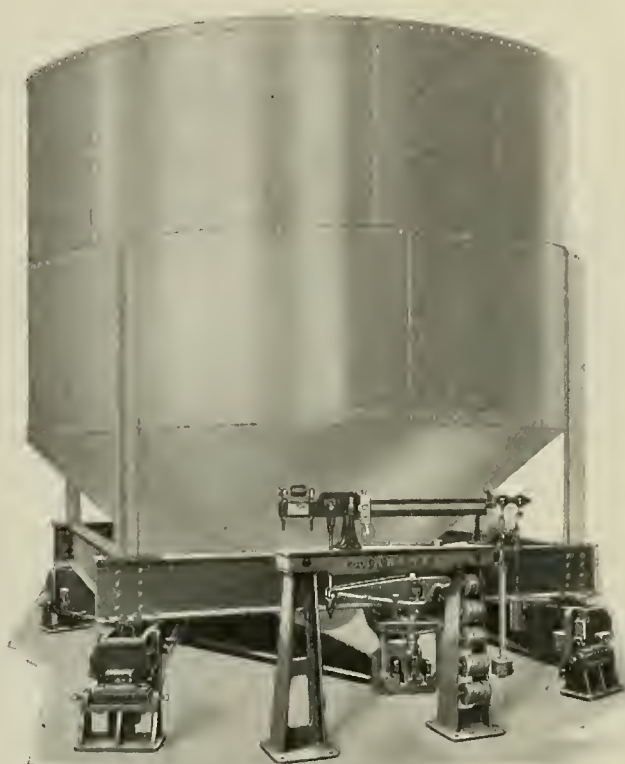
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Indiana

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Grain Elevator Scales for All Requirements

The design of Fairbanks 2000-bushel and 2500-bushel hopper scales is guided by requirements set up in specifications of I. C. C. Docket 9009, and also incorporates an experience gained by nearly a century of scale building.

Principles proved by use in Fairbanks Type "S" railroad track and auto-truck scales are applied to accomplish the fine performance required of hopper scales in closely supervised grain terminal markets. The load is transferred from the hopper to the scale levers through a flexible combination of suspension elements which allow for the disturbance of emptying the hopper without changing the accurate initial balance of the scale.

With all like parts of the scale interchangeable, the scale is easy to erect, and once set with the levers level and connections plumb, the scale remains accurate and sensitive for years.

All knife edges and bearings in full view make inspection rapid and easy. Notches for accurate placing of the poise prevent lodgment of dirt, insuring clear printing of weight tickets. The positive weight-lifting device saves time in checking balance to prove the hopper empty before proceeding to the next draft.

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Preferred the
New York
Broome and Lafayette Sts.



World Over
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Indianapolis—Your Market—A Three Times Greater Grain Market

Indianapolis, the center of grain centers, is known today as one of the most important, rapidly growing grain and hay markets in the country. Receipts of grain during the last ten years have nearly trebled in volume, due to the advantages its geographical location offers to the grain and hay producing and consuming sections of the country, its splendid railroad facilities assuring prompt returns on shipments, its large local consumption of grain by its corn and flour mills and its manufacturing industries, its increased elevator storage and drying equipment, its adequate weighing facilities and efficient inspection department. This has made Indianapolis more and more important each season for shippers and buyers of grain, hay and feed.

Movement of Grain and Hay During the Year 1925

	Receipts	Shipments
Corn	18,838,000 bushels	14,527,000 bushels
Oats	9,016,000 bushels	7,818,000 bushels
Wheat	4,527,000 bushels	2,141,000 bushels

The following Receivers and Shippers are members of
Indianapolis Board of Trade

HAYWARD-RICH GRAIN COMPANY COMMISSION AND BROKERAGE 414-415 Board of Trade Building	WM. R. EVANS, President GEO. H. EVANS, Sec.-Treas. Midwest Elevator Company Incorporated BOARD OF TRADE	FOR SERVICE—EFFICIENCY—COURTESY SHIP TO HART-MAIBUCHER CO. Consignments and Sales to Arrive
The Cleveland Grain Co. OPERATING FIVE TERMINAL ELEVATORS <i>Mighty Good Consignment Service</i> Ed. K. Shepperd, Manager	WALLACE-GOOD CO. Grain, Stocks, Cotton <i>Operating the James E. Bennett & Co. Wire</i> Room 118, Board of Trade Bldg.	H. E. Kinney Grain Co. COMMISSION—BROKERAGE
THE LEW HILL GRAIN COMPANY G R A I N COMMISSION, BROKERAGE Phone Main 3886		The Bingham Grain Company Receivers and Shippers of G R A I N

WELLER EQUIPMENT

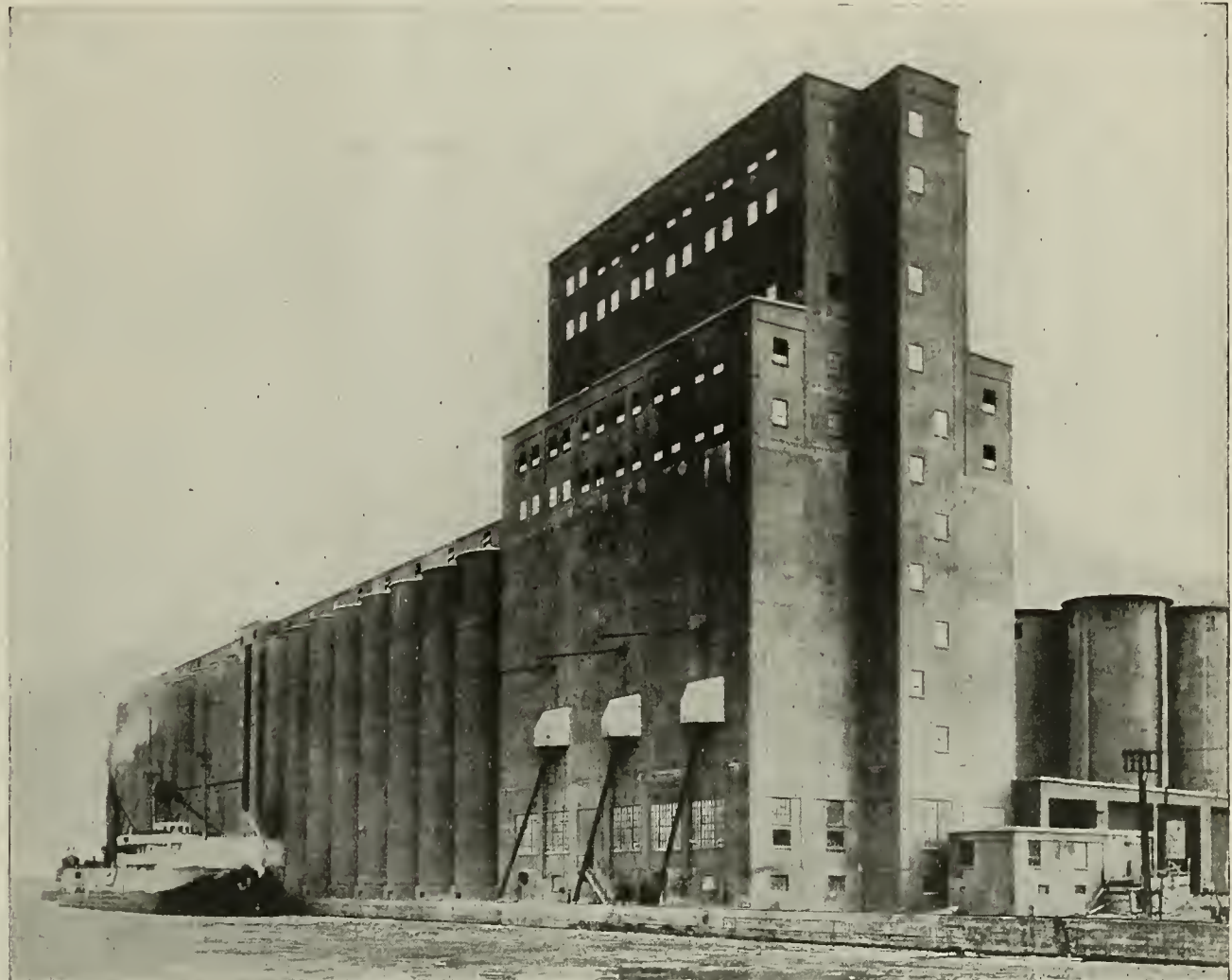
The Better Kind of Grain Handling Machinery



WE MAKE

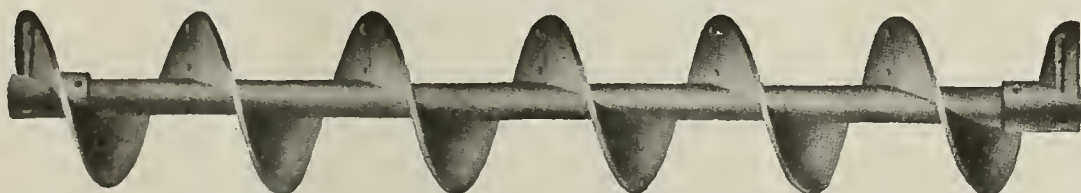
Apron Conveyors
Belt Conveyors
Drag Conveyors
Pan Conveyors
Mixing Conveyors
Spiral Conveyors
Trippers
Bucket Elevators
Elevator Buckets
Elevator Boots
Elevator Casing
Elevator Heads
Sack Elevators
Barrel Elevators
Elevator Spouts
Loading Spouts
Dock Spouts
Chain
Sprockets
Grain Cleaners
Truck Dumps
Wagon Dumps
Truck Hoppers
Power Shovels
Car Pullers
Rope Drives
Gears

Power Transmitting
Machinery



Weller made products are sold on the basis of quality. Installed in your elevator they will help you to operate at full capacity at the lowest cost for upkeep. Frequent shutdowns and waiting for repairs dissipate your profits.

WELLER SPIRAL CONVEYORS



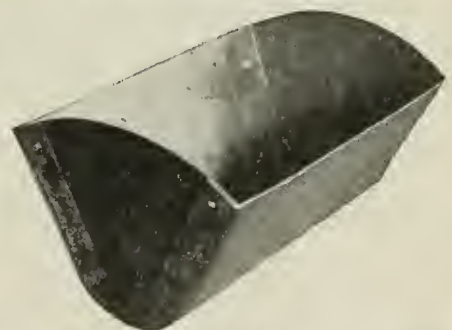
Cold Rolled Steel Sectional Flights. Wear Long. Evenly Balanced. Run True. Interchangeable with All Standard Makes.

We Also Make

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Send Us a List of Your Requirements We Will Quote Prices

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Increase the capacity of your Elevator. Perfect discharge at low or high speed. Substantially constructed of heavy sheet steel, riveted at each corner and spot welded on the laps. Reinforced with extra thickness of steel on the back.

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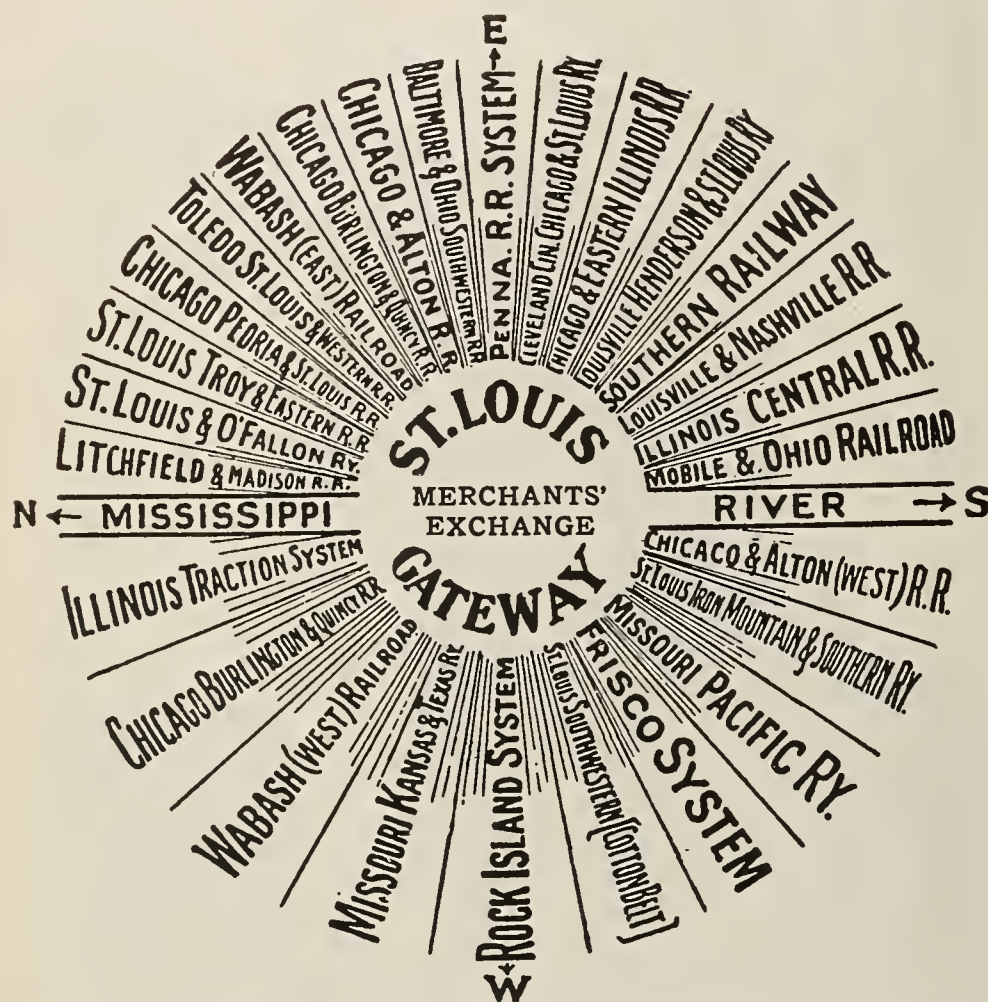
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SALT LAKE CITY

ST. LOUIS, MO.



Within a radius of 25 Miles—Center of Corn Production.
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 Within a radius of 135 Miles—Center of Farm Area.
 Within a radius of 100 Miles—Center of Farm Valuation.
 Within 175 Miles—Center of Population, United States.

St. Louis One of the Greatest
Primary Grain Markets in the
United States

More than One Hundred Million
Bushels of Grain Received
Annually

Movement of Grain by Barge
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for Export a Factor in Grain
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GRAIN AND HAY

Write Us for Full
Information on
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BOUGHT TO ARRIVE
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Come to St. Louis

Best Grades of Soft Winter and Hard Red
Wheat always available. Millers for years
have found the St. Louis Market most satis-
factory for wheat supplies.

The Winter Wheat Market

5 Miles of Webster Conveyors



With a receiving capacity of 32 carloads of grain per hour, this great grain elevator at Locust Point, Baltimore, is probably the most modern and fastest grain handling plant in the world.

4,825 sets of Webster Troughing Carriers are in use in this great plant, making a total conveyor length of five miles. 28,000 pounds of grain are carried per minute at a speed of 800 feet per minute.

These Webster Troughing Carriers are of malleable iron with supporting angles of steel. They are simple and rugged and operate with exceptional smoothness.

The field of belt conveyor service is a vast one and requires expert knowledge in selecting the correct application for specific requirements. Webster engineers will gladly confer with you on this subject, without obligation.

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"Eureka"

- "Invincible"

Grain

Cleaning

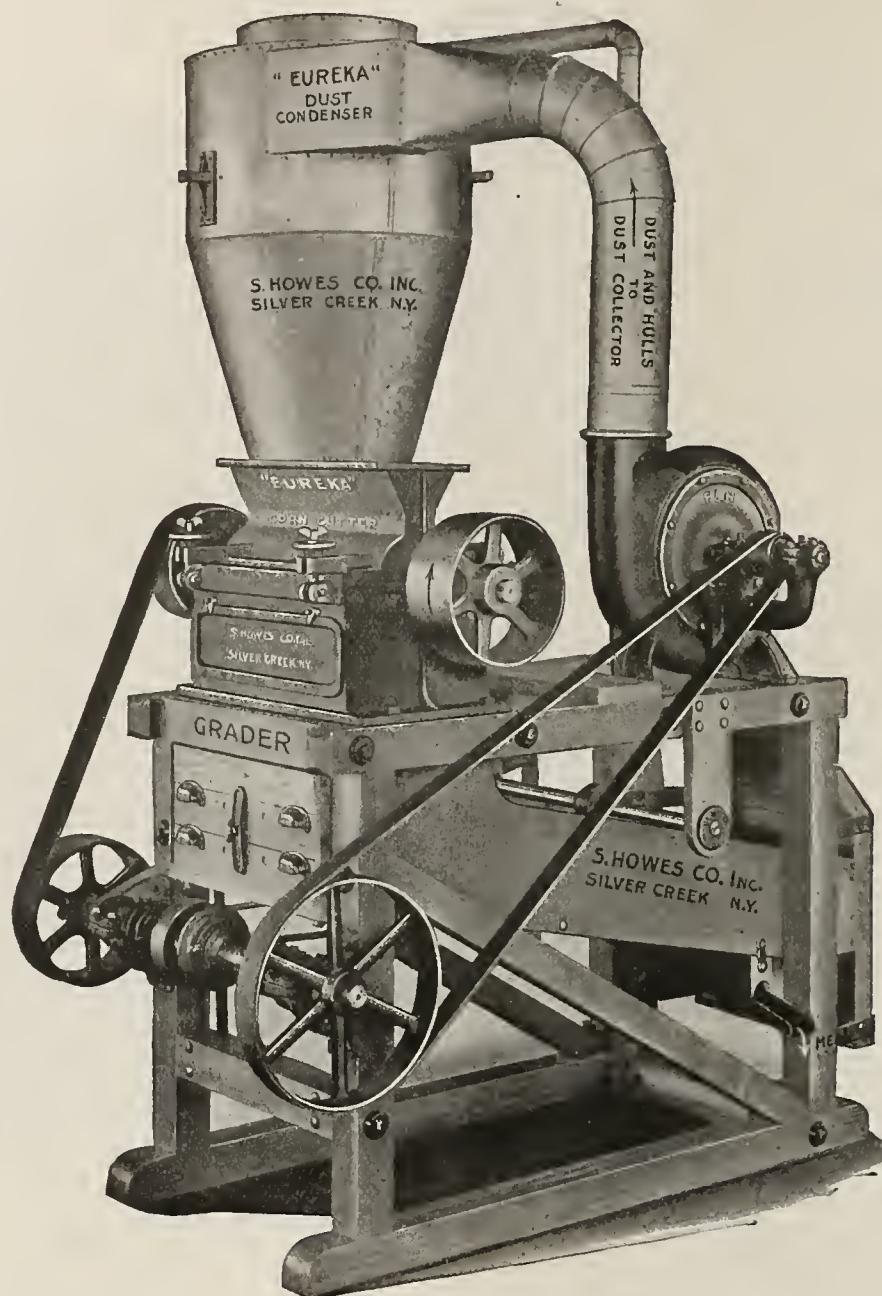
Machinery

**"ALL-IN-ONE"**

Six Units
in
One Machine

Makes
much
large
stock

"ASK
YOUR
NEIGHBOR"

**"ALL-IN-ONE"**

Six Units
in
One Machine

Makes
very
little
meal

"ASK
YOUR
NEIGHBOR"

"Eureka" Combined Corn Cutter, Cleaner, Sifter and Grader

A Corn Cutter, a Polisher, a Sifter, a Grader, an Aspirator and a Dust Collector; the entire group condensed into a single machine. This represents quite a big saving, for the outfit can be quickly and easily installed and there is but one driving belt to provide.

As the corn is being cut, it is given a gentle polishing. The cut stock is then separated into 3 sizes and the meal sifted out. Each grade of corn is aspirated; dust, beeswing, bran, hulls and yellow caps are sucked out by the fan and blown into Dust Collector. No material is lost.

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European Branch: 61 Mark Lane, London, E. C. 3, England.



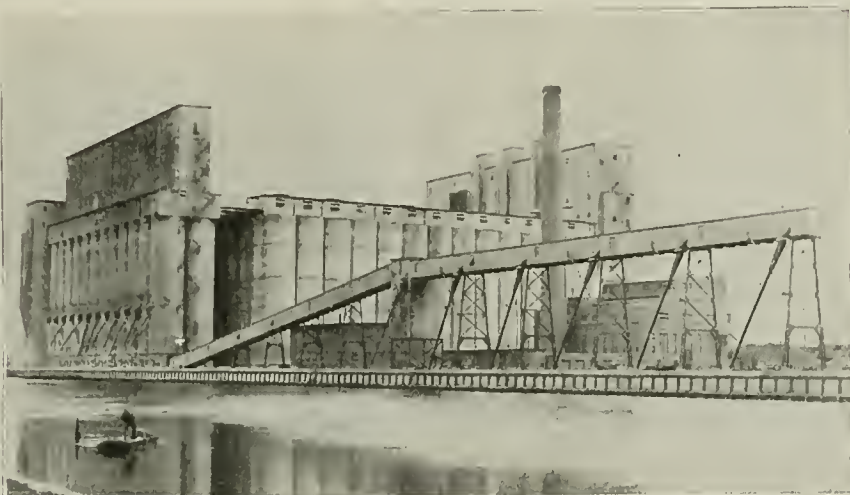
Manchester Ship Canal Elevator
Manchester, England
Capacity 1,500,000 Bushels
Completed 1914



Buenos Aires Elevator Co.
Buenos Aires, Argentina
Capacity 750,000 Bushels
Completed 1920



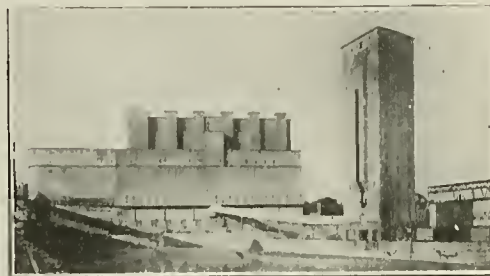
John S. Metcalf Co. Grain Elevator Engineers



Chicago & North Western Railway Elevator
South Chicago, Illinois
Capacity 10,000,000 Bushels
Completed 1920

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Harbour Commissioners Elevator No. 2
Montreal, Quebec
Capacity 2,600,000 Bushels
Completed 1912



Sydney Terminal Elevator
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Capacity 6,400,000 Bushels
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MONARCH

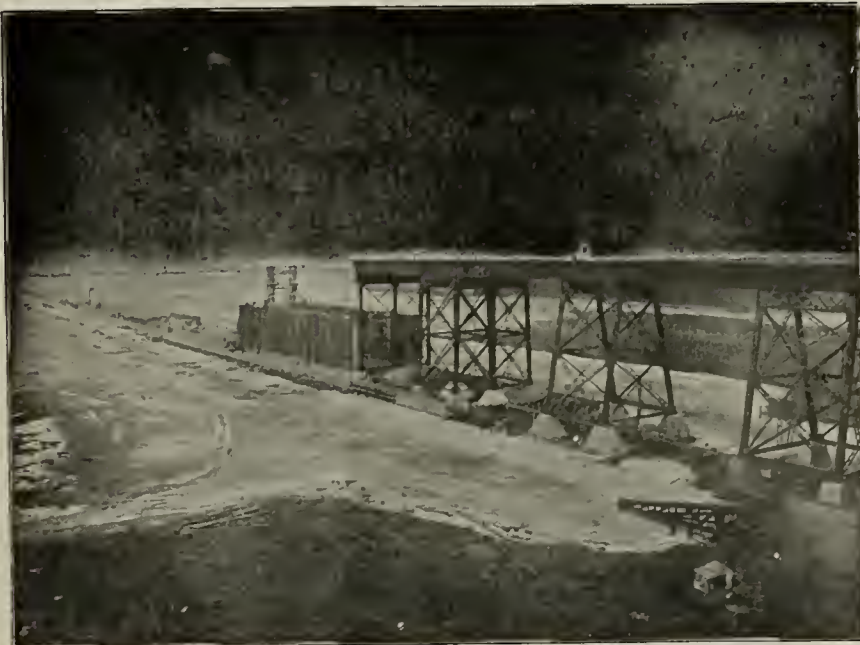
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Assure You
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Satisfaction
Let Us Submit
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One of the Modern Houses Which Has Made a Record
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Insurance Reduction Soon Pays Cost

Build your own system of Lightning Protection. Your boy can build a Radio—You can build Lightning Protection—with the efficient and superior Shinn-Flat Cable which will last the life of your building.

Most elevators are alike—simple to protect! Shinn-Flat will protect your building from Lightning and entitle you to a lower insurance rate which will soon pay the cost. Shinn-Flat insures the use of your building when the crop is harvested.

Shinn-Flat Cable provides for expansion and contraction of loaded and empty elevators—no strain to pull fasteners loose—affording permanent lightning protection!

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Grain Elevator
Operator
Should Get
a Copy of this
Book of



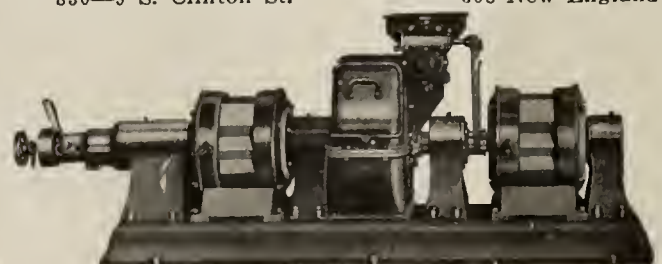
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If you do custom grinding or are just thinking of equipping to do it, you are interested in the machine that will do it with the lowest cost, give the quickest service, do the most uniform job of grinding and be easy and simple to operate. That's why you should have a copy of this booklet that shows why and how the Monarch is the superior feed grinder. Send for Booklet B-10 now.

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**Furnish Plans, Estimates and Build
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Our long experience as a builder of elevators insures you an up-to-date house. Write today.

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ARE YOU WORRIED

about the condition of that grain in your bins?

Let us equip your storage with a

Zeleny Thermometer System

to tell you the exact condition of
the grain and cut out the worry

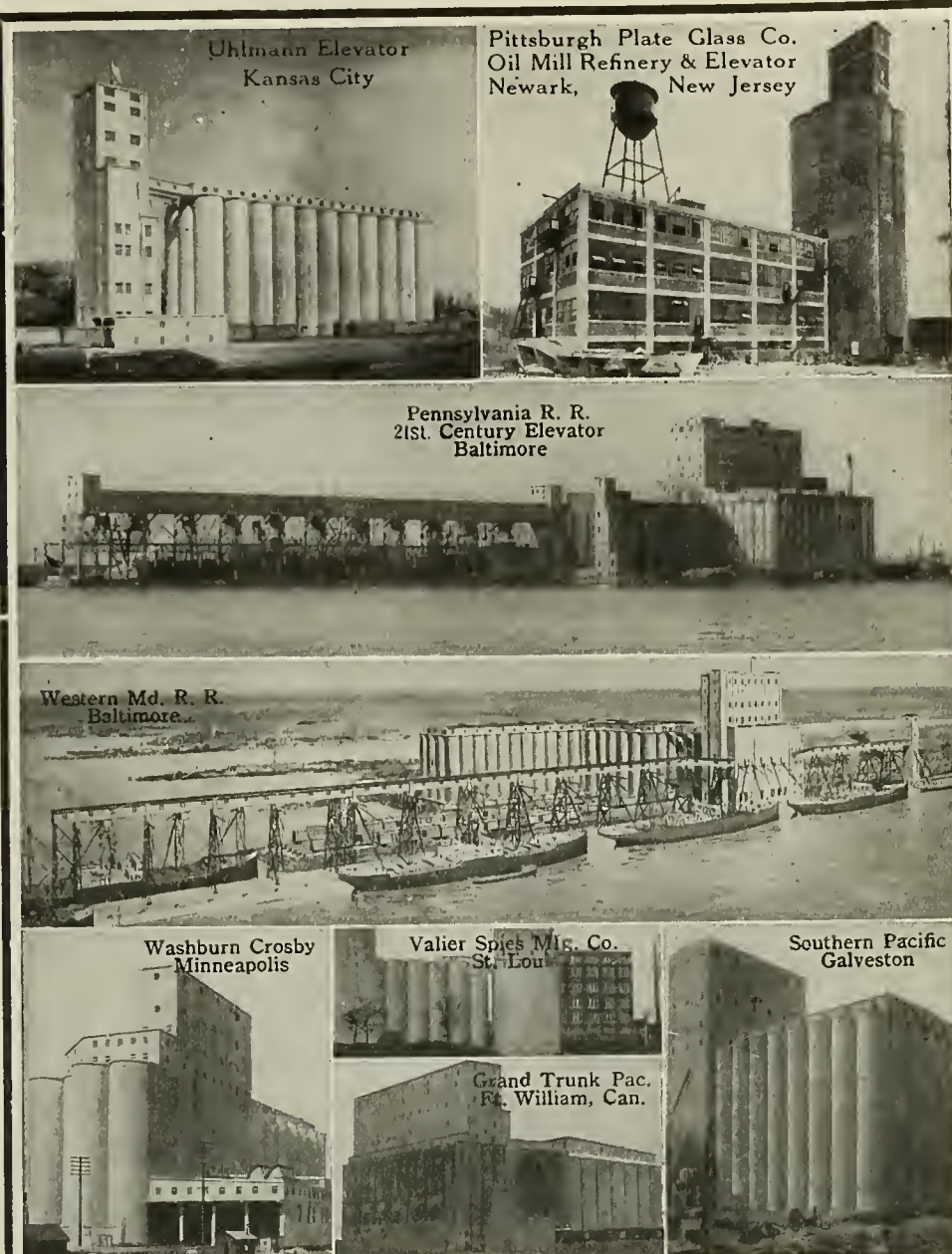
Over 150 Elevators Equipped

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Grain Elevators**

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In all parts of the world

*Every day in every way we are designing and building better and better Grain Elevators.
We have built for many of your friends—Eventually we will build for you. Why not now?*

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**ELEVATORS, MILLS AND WAREHOUSES
COMPLETE**

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2,500,000-Bushel Terminal Grain Elevator

Designed for

The Philadelphia Grain Elevator Company

PORT RICHMOND

PHILADELPHIA

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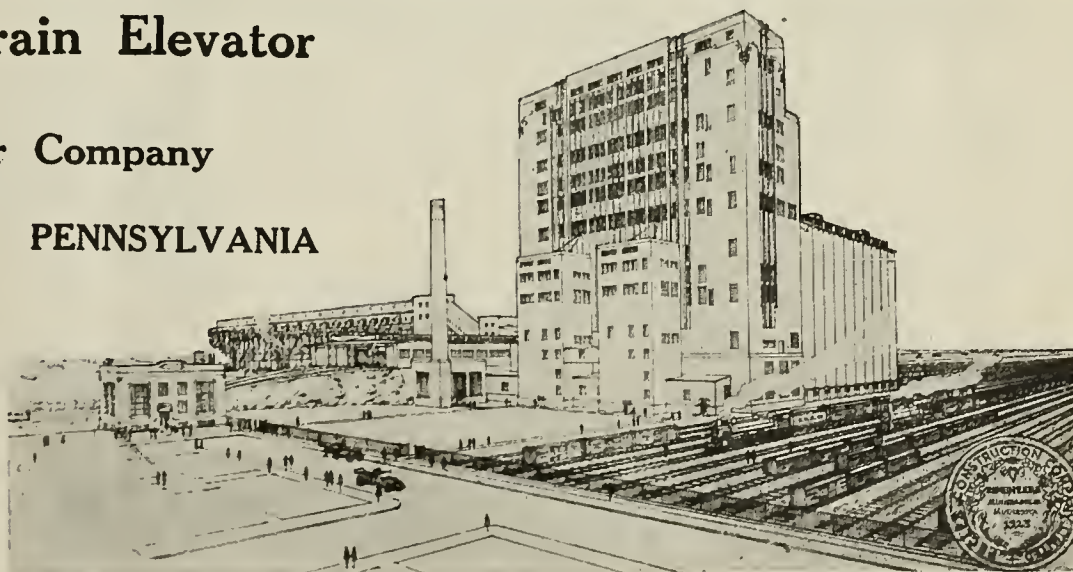
BY

**FEGLES CONSTRUCTION
COMPANY, Ltd.**

Engineers

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FORT WILLIAM, ONT.**



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Terminal Grain Elevator
Baltimore, Md.

Constructed by

THE **M. A. Long** CO.

The Long Building
10 W. Chase St.

Baltimore, Md.

Engineers and Constructors
Grain Elevator Department



*The Most Efficient Grain Handling
Plant in the World*

Capacity 3,800,000 Bushels



NEW CANADIAN GOVERNMENT ELEVATOR AT EDMONTON, ALTA.

This large modern grain elevator just completed at Edmonton, Alta., was equipped with

GURNEY SCALES

The Port Richmond Elevator (Philadelphia, Pa.) now under construction will be equipped with 11 2,500-bushel capacity Gurney Scales.

GURNEY SCALE COMPANY
HAMILTON, ONTARIO, CANADA



CAPACITY 800,000 BUSHELS

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Or even casually interested in concrete grain storages notice and usually comment on the accurate alignment, smooth walls, and clean cut appearance of

POLK SYSTEM BINS

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POLK GENUNG POLK CO.

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INDIANA

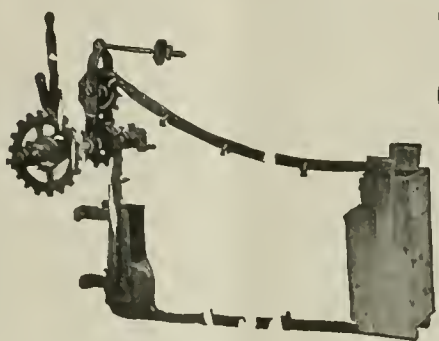
LIGHTNING PROTECTION PAYS FOR ITSELF IN ACTUAL CASH

The initial cost is very small and the saving in the cost of your insurance means many extra dollars in your pocket every year. Your insurance company or this office will be glad to give you standards for such protection and to estimate your savings in cost of insurance.

Mutual Fire Prevention Bureau

230 East Ohio Street, Chicago

Representing the Mill Mutual Fire Insurance Companies

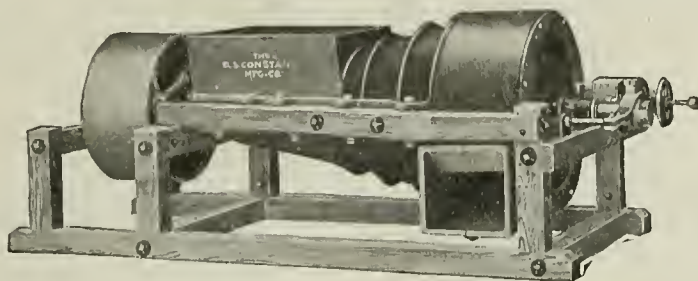


Get Your Grain in—and the Farmer Out—in a Hurry. The Cost Is No More.

Here is your combination for speed and insurance against the costly "Choke-up."

The U. S. Chain Conveyor and Feeder
The U. S. Pitless Corn Sheller
The U. S. "V" Type Elevator Bucket

We build our chain feeders to deliver the capacity of U. S. sheller which is sufficient endorsement of durability and capability.



The "V" bucket completes a U. S. Sheller installation by giving the increased elevating capacity required. Manufactured in all sizes with dies stamping the bucket at one operation from a single sheet of metal.

Priced accordingly

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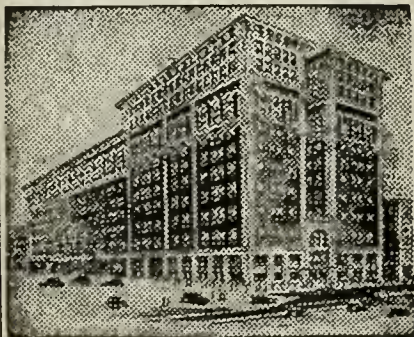
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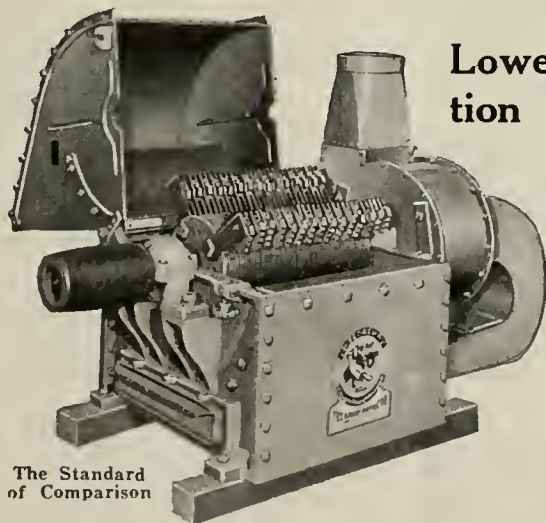
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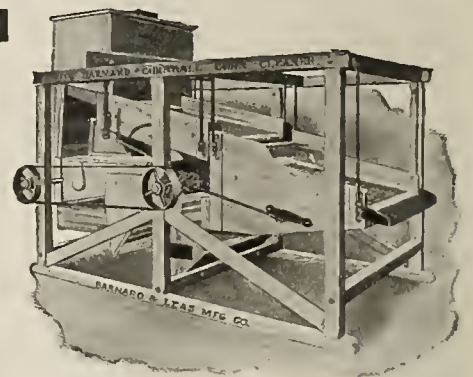
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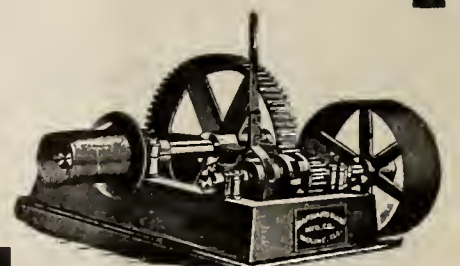
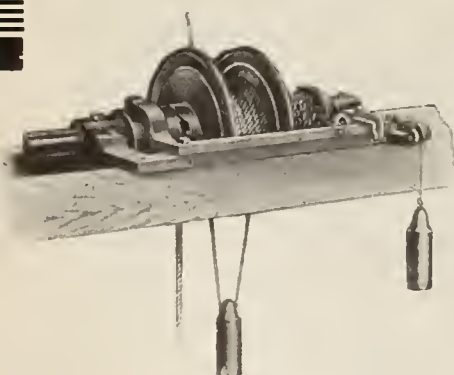
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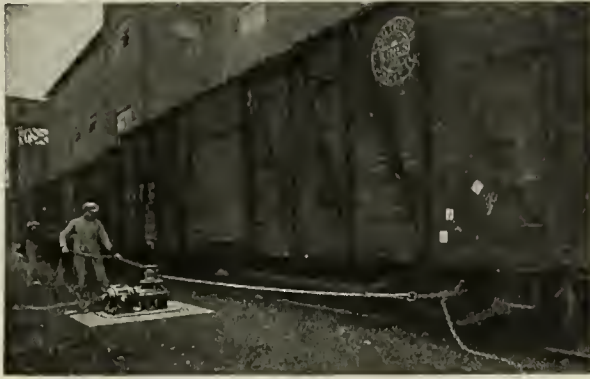


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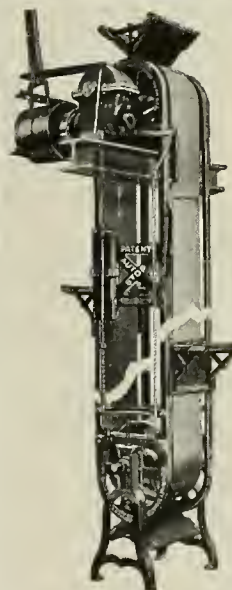
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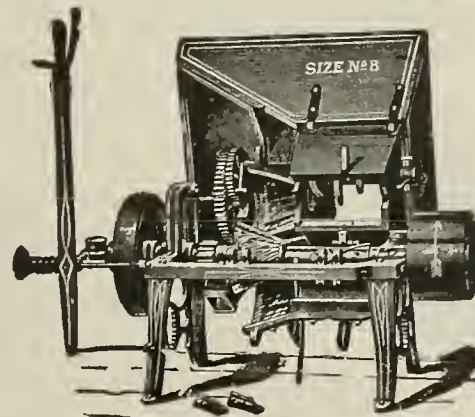
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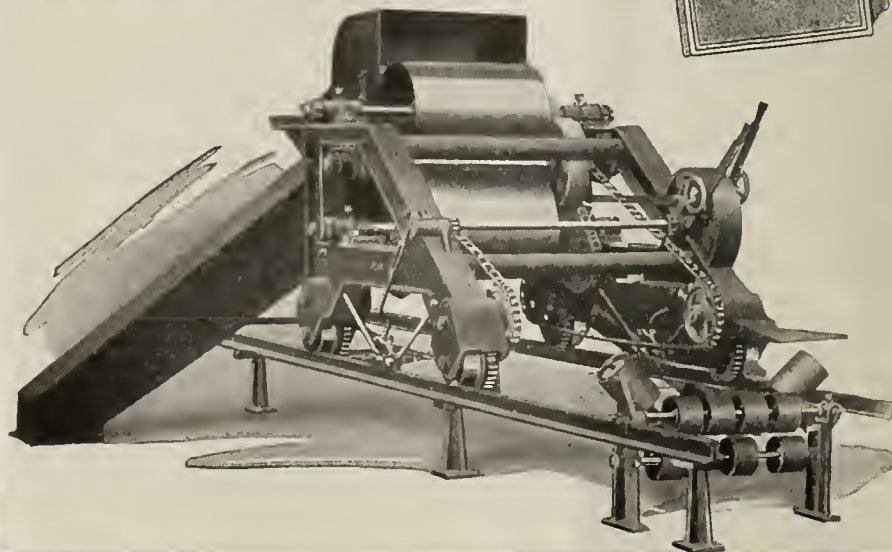
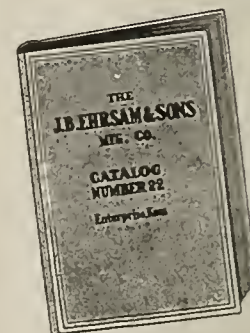
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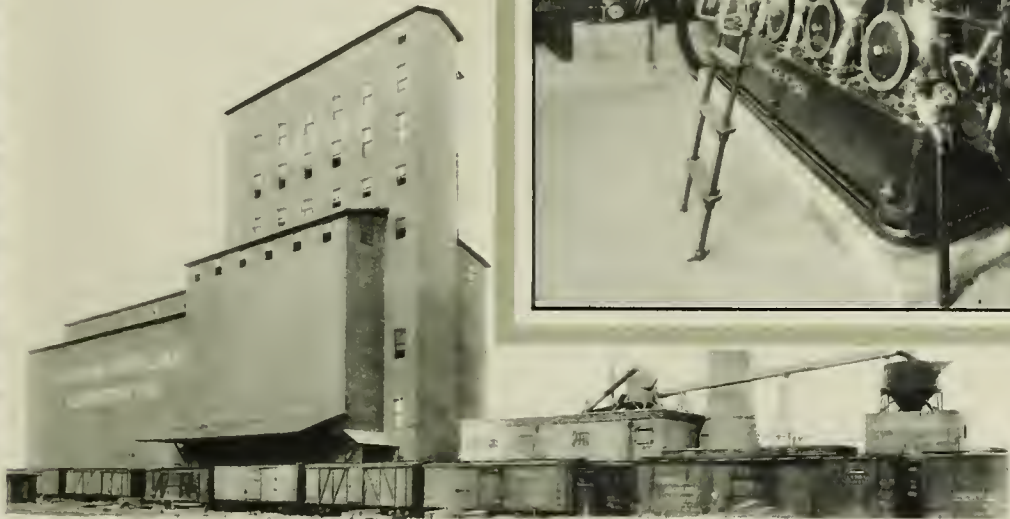
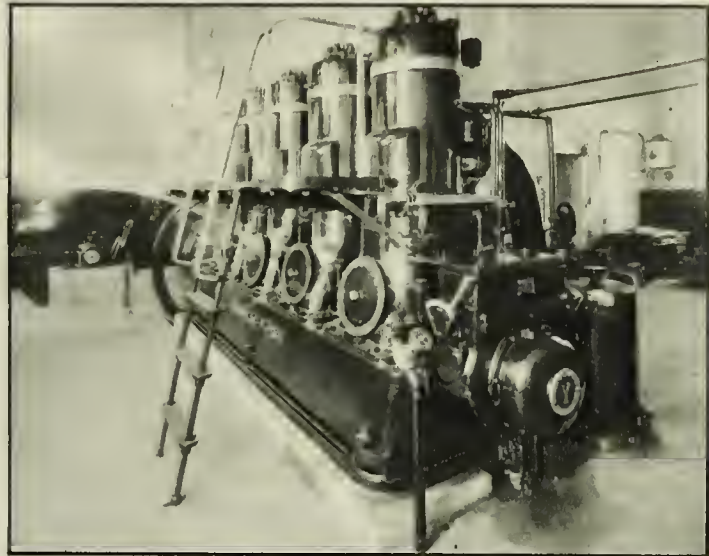
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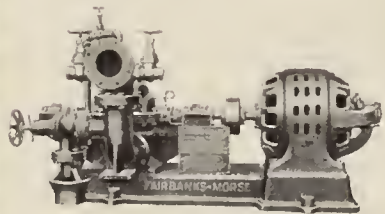
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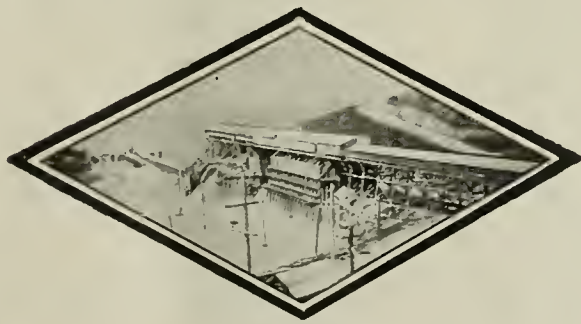
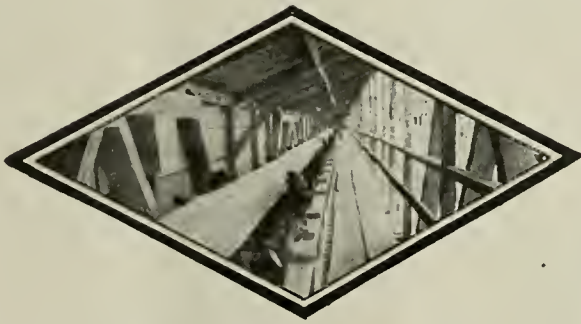
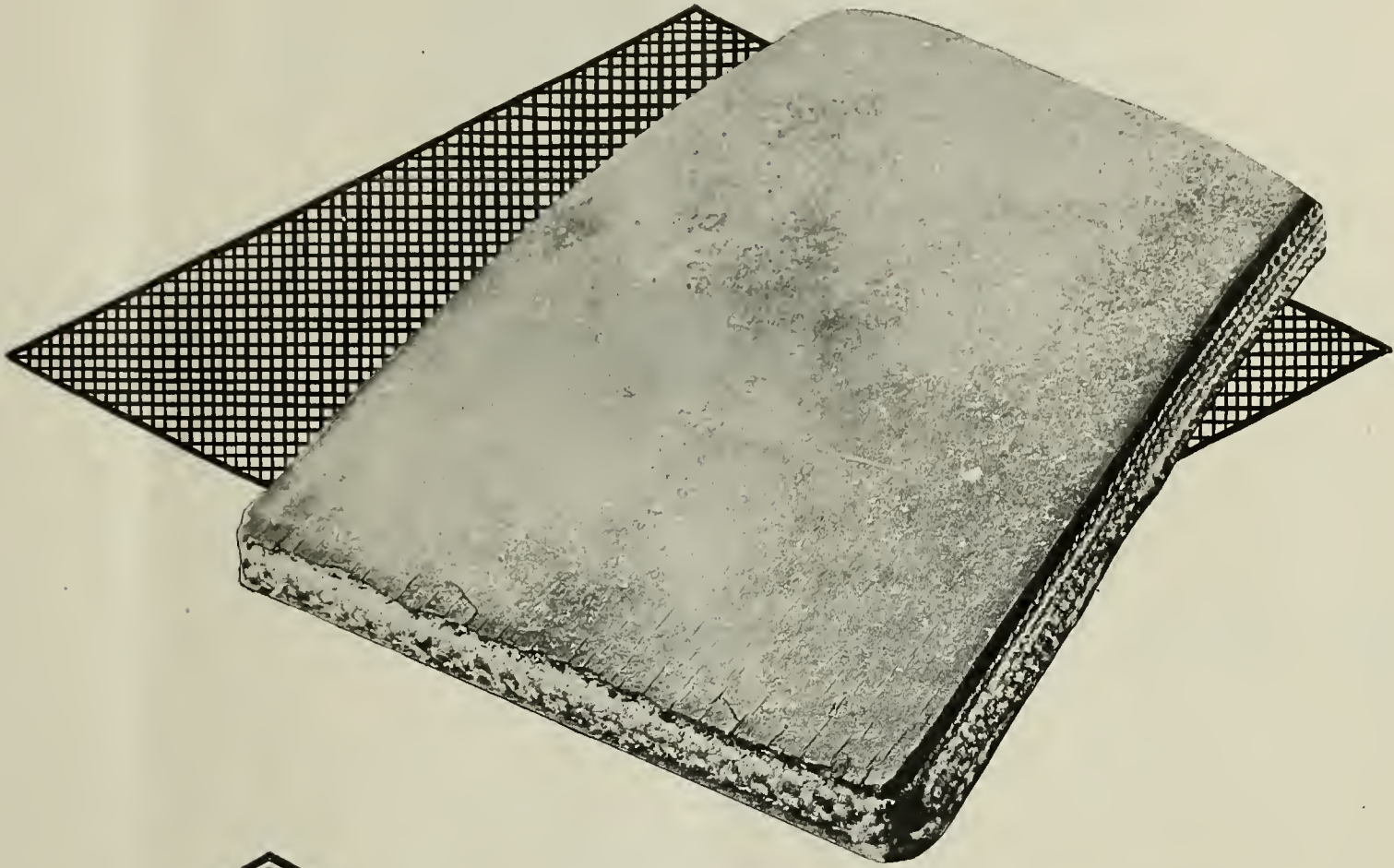
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You are not interested in crushed stone, but the service is more severe on conveyor belts than grain, therefore this photograph should interest you keenly.

It shows a section of Diamond Conveyor Belting that went into action at the San Francisco Crushed Rock Co. (now Blake Bros.) at Port Richmond, Cal., on April 6, 1913.

It stuck to its job until August 6, 1925—12 years and 4 months—during which time it handled 1,300,000 tons of crushed rock at a ton cost of only .00146!

The cover wore down only $\frac{1}{32}$ " and when taken off the belt was found in such good condition that half of it was sold for conveying salt, at a price representing 20% of its original cost.

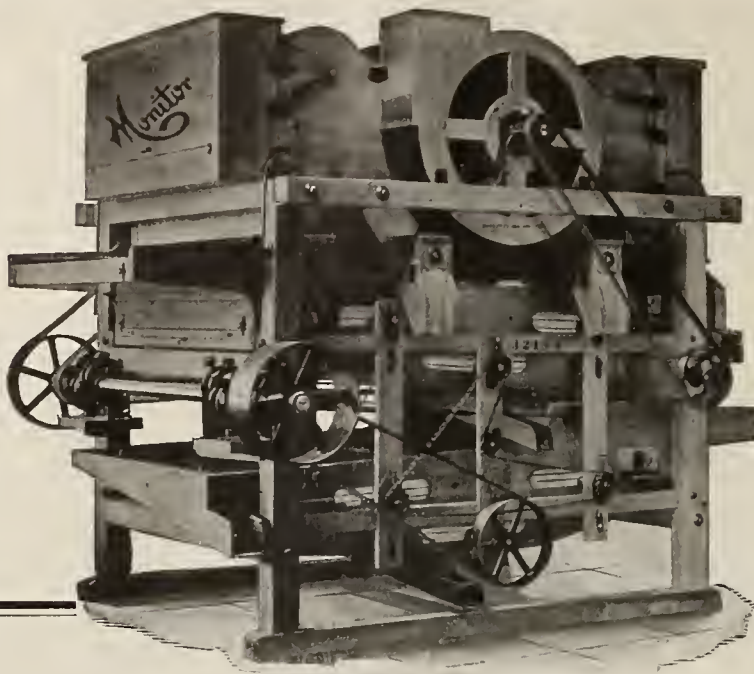
Needless to say, the plant is now standardized with Diamond Belts.

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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

Established in 1882.



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Subscription price, \$1.00 per year. English and Foreign subscription, \$1.75 per year.

Established in 1882.

VOL. XLIV

CHICAGO, ILLINOIS, MAY 15, 1926

NO. 11

Another Addition to Buffalo's Grain Storage

New Concrete Elevator of the Saskatchewan Co-operative Elevator Company, Ltd., Adds Over a Million Bushels' Storage to Buffalo's Grain Facilities

BUFFALO has added to its grain storage units along the river until today it has to its credit quite an imposing array of elevators when viewed in the conventional "birds' eye view". Not all of these elevators can call themselves new, but a fair proportion of this storage capacity is represented by modern units which have not been in operation so very long. Among them are terminal elevators which represent the latest achievements in engineering and construction generally, and some of them may well lay claim to unusual operating speed—a feature which commands much importance among terminal houses.

Added interest in Buffalo's advantageous position in the grain trade today is developed from the fact that the Grain Dealers National Association will hold its annual convention there this fall. This will bring together the usual large group of grain men, including terminal market men, as well as the proprietors of numerous country houses. An excellent opportunity will be afforded to look over the port facilities and to examine some of the modern plants which have been erected since the last time that the national association held its annual meeting in Buffalo.

Another chapter has been added during the last year to Buffalo's growth as a grain center, by the opening of the newly constructed elevator of the Saskatchewan Co-operative Elevator Company, Ltd., at the foot of Tift Street. There was no large celebration of the event, but J. A. Maharg of Regina, Sask., president of the company, was present with several invited guests when the first ship to tie up at the elevator arrived. It was the *Macbeth*, of Fort William, and the marine legs immediately began to take the grain from her hold.

The plant measures 261.8 feet in length and 69.8 feet in width. It is a reinforced concrete structure, and the foundations were laid by the Barnett-Record Company of Minneapolis, and the erection of the immense superstructure was handled by the Monarch Engineering Company, Buffalo.

As is indicated in a casual glance at the accompanying illustration, the new elevator makes an excellent appearance and has all the usual modern structural conveniences. It is fire resistant and a complete system of extinguishers has been installed. The Lehigh Valley Railroad runs past the property and sidings have been provided, connecting with the main line of the railway. By combining the excellent opportunities of Buffalo as a railroad center with its equally good facilities as a

shipping point for water consignments, the house has ideal conditions for handling its traffic problems to the best possible advantage.

The storage capacity of the house is 1,100,000 bushels, which is divided into 33 circular tanks, 20 interspace tanks and 24 outerspace units. The maximum receiving capacity is 60,000 bushels per hour and the shipping capacity is 40,000 bushels per hour. It is expected that this will shortly be increased to 60,000 bushels per hour also.

Electric current is used for power, and the elevator has its own sub-station. Twenty-nine motors are in use, having an aggregate of 1,347.5 horsepower. Morse Silent Chain Drives, which have been provided for each of these motors, transmit the power economically, and efficient operation throughout is assured.

For unloading, the house is equipped with marine towers and power shovels; and there are seven

more than 12,000,000 bushels of grain. The company owns and operates a terminal elevator at Port Arthur, Ont., and has a storage capacity of 15,500,000 bushels at this point. Rapid unloading, cleaning and drying of grain for transshipment from rail to lake steamers—all can be accomplished with the special equipment available at the terminal house.

The main office of the company is located at Regina, Sask. A large commission office is maintained at Winnipeg, Man., and a branch office at Saskatoon, Sask. The export department has offices at Vancouver, B. C., Winnipeg, Man., New York City, London, and Paris. The company holds memberships in all the leading grain markets and exchanges in North America and Great Britain.

The purchase of a waterfront site on the outer harbor at Buffalo, and the construction of a modern fire resistant elevator, is one of the last links in the company's grain handling facilities, making it possible for the company to handle grain entirely within its own organization—from the producer in the Northwest to the consumer in Europe and practically all parts of the civilized world.

The company's property, situated on the Hamburg Turnpike, has a total frontage of 400 feet, extending out into the lake about 1,400 feet to the harbor line, making the total area included about 13 acres. While the capacity of the present unit is 1,100,000 bushels, the site permits of future additions up to a total of

4,000,000 bushels, without crowding the space.

All elevating, conveying and handling machinery was furnished by the Webster Manufacturing Company of Chicago.

The water slips, for the large steamers, are 23 feet in depth at low tide and are 143 feet in width; for canal steamers and barges, 18 feet deep at low water, and 70 feet wide. A large turning basin between the elevator docks and the south breakwater entrance assures easy approach to the elevator.

Last month the shareholders of the company voted to sell its system of country elevators and large terminals at Port Arthur and Fort William, Ont., and Buffalo, to the Saskatchewan Wheat Pool. The special meeting at which this decision was made was held at Regina, Sask., and the reported consideration was \$15,000,000.

It has been a long process, the evolution of grain storage and handling methods. Originating with such primitive means as were used in those ancient days when grain was piled on the ground, where in



NEW ELEVATOR OF THE SASKATCHEWAN CO-OPERATIVE ELEVATOR COMPANY, LTD., AT BUFFALO, N. Y.

belt conveyors which are situated on the bin floor, in the basement and in the marine legs. Four large hopper scales have been installed to take care of weighing, and facilities for recording weights and maintaining an accurate check on the grain are complete in all respects.

The chief grains handled are wheat, oats, barley and corn, and it is estimated that by the end of the first year of operation between 30,000,000 and 50,000,000 bushels will have been handled through the elevator.

The Saskatchewan company is a farmers' co-operative organization which was formed in 1911 by special act of the Saskatchewan legislature, and it is licensed in the State of New York. It has approximately 30,000 stockholders, all of whom are farmers and grain producers in the province of Saskatchewan, Canada.

Having commenced business with only 46 country elevators, the company now owns and operates 450 country elevators with an aggregate capacity of

dry countries it kept in good condition for long periods, to modern reinforced concrete construction. The first step toward protecting it from the weather and providing permanent places for grain storage was undoubtedly made by making excavations in the ground, covering the floor and sides



TWO OF THE 2,500-BUSHEL SHIPPING SCALES

with stone and placing a roof of thatch and poles overhead. As man became more civilized, bins were built above ground, either of stone or wood, but these storage units were generally in the form of single bins, devoid of mechanical appliances for filling and emptying, except in rare instances.

The "cribbed wood" elevator may be classed as comparatively modern, and it was in that stage of the progress in elevator construction that the use of a large number of small compartments was introduced. While this was a vast improvement, it remained for engineers of the present period to in-



TRACK SHED, LOADING SPOUTS AND PLATFORMS

roduce the highly specialized mechanical features of scientific development.

The entire marketing system, not only of this country, but of the world at large, is in some measure dependent upon the large terminal elevators in

use today. Rapidity of handling grain and the means of handling large quantities of it in short periods are essential in the modern scheme of life, and the tendency in recent years has been toward getting larger and faster terminal houses.

The new plant of the Saskatchewan Co-operative Elevator Company, at Buffalo, probably is one of



VIEW OF BIN FLOOR WITH CONVEYORS

the best examples of what is being accomplished by the engineers today, and it equals the best of houses in its class. Combined with the improved features of utility, it also has an appearance which does credit to those who planned and had charge of the erection of it.

MACHINE-CORN BARTER ENDS

Country stations from which corn is to be relayed to the International Harvester Company, as a result of its recent offer to barter machinery for grain, are now awaiting disposition orders from Chicago. The corporation's offer was terminated May 1. Officials at the harvester headquarters state that the offer was not withdrawn because of lack of faith in the value of corn, but that belief still was held that corn was worth \$1 a bushel or more when marketed in the form of pork or beef.

Notice will be given to dealers as to when farmers will be called upon for deliveries. In a letter sent out a few days ago to dealers in various parts of the United States the notice of the termination of the offer was this: "The farmers in the corn belt have now had nearly four months in which to take advantage of this offer, and the time has arrived when we must determine the amount and location of the corn to be delivered to us and make arrangements for its receipt. You are therefore notified hereby that the above offer will be terminated on all lines at the close of business, May 1, 1926."

It is pointed out that with hogs selling around \$12.35 to \$13.60 a hundred pounds, corn should be worth about \$1.25 to \$1.30 a bushel, while it is actually selling for little more than half that price.

CORN GROWTH DELAYED

Grain crop prospects have been seriously retarded, says the Department of Agriculture, in its May report on the agricultural situation. As a result of the delayed growing season over much of the corn territory, farm operations are under a handicap that will be felt well into the summer. "Fairly good progress has been made in planting Spring wheat, says the report, but growth has been slow."

The probability now is that corn acreage will be no larger than last year's, if as large. Small grains are behind schedule. Meadows have a poor start. It would seem that the probable volume of feed-stuffs might be relatively less excessive this year than it was last. The tendency among hog producers is clearly to increase their stock. Eastern dairy cattle have moved up in price, with a probability of heavier feeding next fall. Consideration of the whole feed grain situation emphasizes the suggestion that current prices of most feeds are at a relatively low level.

Other factors in the agricultural situation are that there were practically the same number of cattle on feed last month as a year ago, and that

reports from feeders indicate that the weakness of the fat cattle market during the past two months has been discouraging to feeders despite the low price of corn. The narrow margin between feeding cattle and fat cattle prices has also tended to discourage feeding.

A GRAIN REFERENCE FILE

Grain men frequently have need for identifying some particular grain seed or weed seed, and samples are not always available. The practicality of having such a collection on the trading floor of an exchange was seen by Ed Zarwell, a grain inspector on the Milwaukee Chamber of Commerce inspection force. As a result he has col-



BOTTLED SAMPLES COLLECTED BY INGENIOUS INSPECTOR

lected and bottled 294 kinds of grains, seeds and products manufactured from them, and the extraneous matter which lowers the grade and makes the grain man lose what would otherwise be profit.

In the collection there are wild oats, mustard, kinghead, foxtail, Sweet Clover, garlic, etc., besides oats, rye, barley, wheat, etc. These aggregate 60 bottles. Each grain has its own peculiar class of hangers-on in the way of worthless foreign matter, all of which have a place in Mr. Zarwell's collection.

RUSSIAN authorities, according to the United States Department of Agriculture, see a slight increase over 1925 in wheat and rye areas for 1926, and the People's Commissariat of Trade announces its expectation of a grain crop for 1926 at least as large as that of 1925.

GRAIN FLEET IN BUFFALO

Six steamers with cargoes of corn and oats left Chicago on May 1, bound for Buffalo, where their transactions with the elevators at that terminal are now complete. This is the initial movement of Chicago's grain fleet this spring. It is about three weeks late compared with last year's schedule. Ice in the Straits of Mackinaw thawed slowly and the delay was largely chargeable to it. Following the first six grain cargoes, went 3,982,000 bushels in lake bottoms the first week in May. Within the last week there has been a proportionate volume of grain committed to Buffalo-bound ships. It was at first reported that the six steamers which left May 1 would be delayed considerably because of ice in the Buffalo harbor. No great wait was necessary however. Lake traffic in grain as well as in many other products is rapidly increasing now that warm weather has set in.

A TONIC FOR CORN EXPORTS

More practicable, it is said, than any of the proposed corn surplus control legislation, is this tonic plan for corn exports as stated below. Exports of American corn to Europe could be materially increased if European importers could be brought to see the feeding and industrial possibilities of the lower grades, says the United States Department of Agriculture. Formerly European importers would buy little if any corn of a grade lower than No. 2, on account of the danger of its getting out of condition during the ocean voyage. Today, however, No. 3, No. 4 and often lower grades of corn can be safely shipped to Europe provided its moisture content is not more than the maximum percentage permitted under the Government standards for No. 2 corn. Such corn is practically as good for feeding purposes as No. 2 corn, a fact with which European buyers are apparently not yet familiar.

Our corn export trade is probably more dependent on keeping the moisture content of the grain low than on price differentials. Argentine corn, in spite of its superior dryness, does not always command a better price than American corn. Sometimes the price of corn from the United States is higher, depending somewhat on the season of the year as well as on comparative demand for the two different types of corn. It should be possible, says the Department of Agriculture, to sell No. 4 grade corn, with its moisture content properly reduced, at prices near or even lower than the prices at which corn from Argentina and other surplus-corn countries is sold.

Elevators Find Oil Power Economical

Operating Costs of Floating Elevator in New York Harbor Show That 100 Bushels Can Be Handled Per Pint of Fuel Oil

DURING the war the business of exporting grain took on an importance hitherto unparalleled. It became a factor not only in the routine affairs of international commerce, but also assumed an added dignity in that the safety of nations depended upon the expeditious handling of food products—and especially cereal grains. The industry was suddenly confronted with the fact that

grain are run alongside the elevator and then transferred to the ship by means of a continuous belted bucket conveyor. A swinging leg suspended from a yoke is swung out of the tower and lowered into the hatches of the grain vessels.

After the grain has been picked up it is first delivered to a scale hopper, where it is weighed in 100-bushel lots. From the scale hopper it is dropped

mits power through a clutch mounted on the engine shaft and a rope drive is used to transmit the power to various parts of the plant.

A Worthington two-cycle Diesel Engine having only a single 12½ by 13¼-inch cylinder, operated at 325 revolutions per minute, furnishes the auxiliary power. It is direct-connected to a 35-kilowatt direct-current generator normally delivering 152 amperes at 230 volts. Although this generating set is subject to heavily fluctuating power demands, it takes loads jumping instantly from 35 amperes up to 180 amperes without difficulty. This performance has been commented on as being remarkable because this is but a single cylinder unit.

One hundred and thirty gallons is the capacity of the daily storage tank which is located in one corner of the engine room. This supplies both of the engines with fuel oil. The height of this tank is great enough to allow the fuel to flow by gravity to the injection pump reservoir. To refill the tank, a hand pump is used, and the time consumed in this operation is only five minutes each day.

Additional requirements in this line are cared for by two storage tanks of a capacity of 5,500 gallons each. These are situated in the forward part of the hull. The contents of the two is sufficient fuel to take care of 11 months of average operating conditions. It has been found that one-third of a gallon of fuel is necessary to handle 1,000 bushels of grain, which works out to better than 100 bushels to the pint.

A small boiler of the type used in heating houses furnishes heat during the cold months on the Diesel boat, and the fuel used for this purpose is anthracite coal. By figuring the cost of this coal in conjunction with fuel oil, the Diesel power cost per 1,000 bushels is about one-third of that of the steam units. Steam driven outfits which require steam on the boilers at all times to the number of 12 aside from this one, are owned by the International.

Computations based on the average number of working hours per day, during one year's period, show that the working hours are ordinarily four and one-half per day. This indicates that coal must be burned 19½ hours per day for no productive purpose, while on the other hand, the Diesel outfit fuel is only used in actual working time.

The following Worthington pumps are supplied with current, the pumps, of course, being driven by Diesel motors; one two-inch centrifugal with a two-horsepower motor for circulating water; one three-



FLOATING GRAIN ELEVATORS IN NEW YORK HARBOR

it not only meant a matter of dollars and cents to the receiving countries, but meant the difference between annihilation and continued existence.

When the war was over the stimulus given the export business still had its effect, despite natural reactions and changing economic conditions, and it is probable that many of the developments of that period might have been delayed a very considerable length of time had not the necessities of an emergency forced the speeding up of progress. The machinery for handling the large export trade is no small item, and is in a sense dependent on the coordinating of the chain of merchandising system which commences with the grower and the country station and does not end until it has passed through all the intervening stages on the way to actually stowing the grain in the holds of ocean going vessels. This requires the rail and inland waterway facilities, the services of terminal elevators, the marketing means furnished by our efficient exchanges, and the port arrangements.

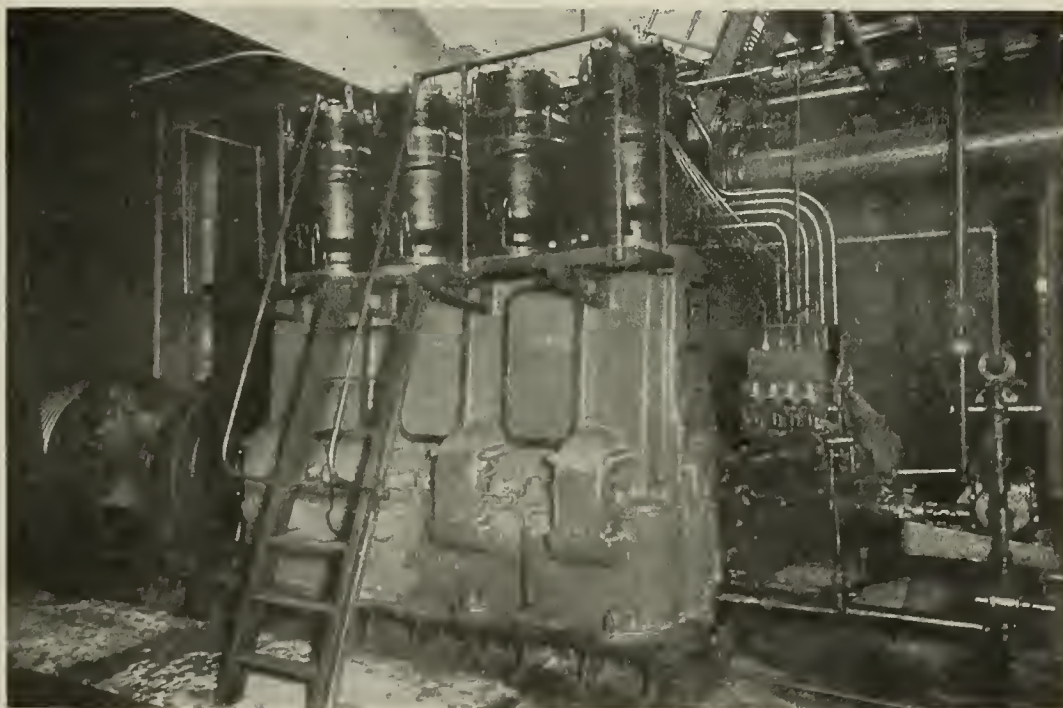
The fleet of floating elevators shown in the illustration on this page are operated by the International Elevator Company, and are a necessary part of the facilities of the Port of New York. Their usefulness has gradually increased rather than diminished as the motor boat service from the head of the lakes to the port has been further developed. These floating elevators constitute the vital connecting link between the export handling of grain and the domestic transportation.

Among the group of floating units shown in the picture is the floating grain elevator *New York*. It is a wooden hull or barge in which the elevating machinery and power plant are housed, and, in short, it may readily be characterized as a practical combination of boat and elevator. This particular one measures 120 feet in length and has a beam of 35 feet. It carries a tower that extends 90 feet above the water line, and is rated as having a tonnage of 536.

Of course, the principal function of the *New York* is loading steamships with grain for export, and boats holding from about 10,000 to 50,000 bushels of

into a receiver, then elevated to the tops of the tower, and carried away by gravity down two 10-inch spouts to the hold of the ship.

Grain in transit from the grain boat to the ship is frequently screened or mixed in accordance with requirements; but when grades are being handled which are delivered to the ship in the same condition in which they are received and under favor-



DIESEL ENGINE THAT SUPPLIES POWER OF FLOATING ELEVATOR

able working conditions, as much as 20,000 bushels have been handled in an hour. This is not the average, of course, but merely an extremely favorable example. It is reported that 100,000 bushels of barley was one of the best eight-hour runs during a period of two years' operation.

The principal engine of the plant is a Worthington two-cycle Diesel Engine, which develops 200 brake horsepower at 325 revolutions per minute, with four cylinders, each 12½ by 13¼-inches. It trans-

inch centrifugal with a two-horsepower motor for pumping dust; one three and three-quarter-inch by four-inch duplex geared plunger pump with a three-horsepower motor for bilge and sanitary service; and one six-inch by 12-inch duplex geared plunger pump with a 40-horsepower motor for deck, and fire service. Starting air is furnished by a two-stage four by three and one-half-inch air compressor, driven by a Worthington four-cycle kerosene engine running at 420 revolutions per minute.

Dust Control in Grain Elevators

By H. R. BROWN and J. O. REED*

COMPRESSED air is necessary for cleaning certain equipment around an elevator, especially motors, from which it is difficult to remove the dust in any other way. A few operators have adapted the compressed-air system for general cleaning. A long pipe, with an elbow at the upper end, or a compressed-air hose line attached to a pole is used to blow the dust from overhead structures which cannot be easily reached with a broom or brush. This method of cleaning, however, creates a dust-explosion hazard and is inefficient. The dust blown from overhead forms in clouds, making it necessary constantly to guard against the ignition of these clouds as the dust settles to the floor. Moreover, the dust must be brushed from the machines or the floor, where it settles after being blown from overhead. Overhead lodging places for dust should be reduced to a minimum and compressed air should be used only for cleaning the motors or other similar surfaces which cannot be satisfactorily cleaned in any other way. The elimination of overhead ledges reduces cleaning to a minimum.

Compressed air should be handled carefully when it is used for cleaning in plants where the dust-explosion hazard exists. The cleaning should be done while the plant is not operating and care should be taken to see that the windows and doors are open so that the building is well ventilated. Special care should be taken to eliminate all possible sources of ignition while the cleaning is in progress or while the dust remains in suspension.

The use of steam instead of compressed air, which has been employed in some industries with varying degrees of success, may be adapted to some parts of grain elevators.

VACUUM-CLEANING SYSTEM

The adaptation of the vacuum-cleaning system to grain elevators for dust removal may still be considered in the experimental stage. The general arrangement of such systems, however, is sufficiently well standardized to warrant a general description.

The system must be capable of handling heavier material than the ordinary vacuum-cleaning system can handle, because grain and foreign material must be rapidly picked up with the dust. More

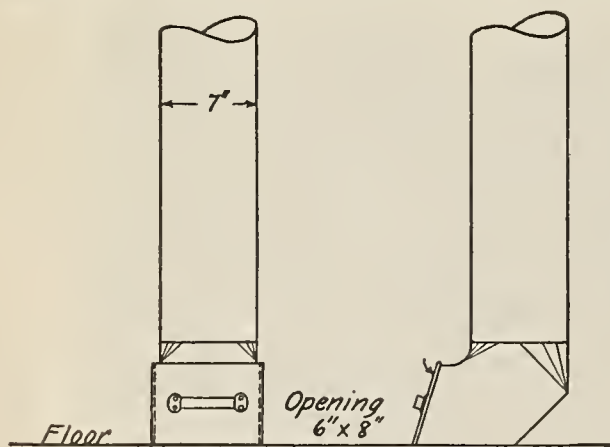


FIGURE 1

rugged fittings are needed in a modern concrete and steel elevator to withstand the extra wear and the rougher treatment. Theoretically, the vacuum-cleaning system is the best for a grain elevator or any other plant where the dust-explosion hazard exists, because it removes the dust without the formation of dust clouds in the building and the dust can be drawn out of cracks and crevices, where it would not otherwise be reached.

In general arrangement a vacuum-cleaning system for a grain elevator resembles the ordinary vacuum system used in hotels and public buildings. The essential parts are a vacuum producer, a network of piping leading to all parts of the building, with suitable inlets or hose connections, hose, nozzles, and a collector or dust separator, installed

in the main line to catch the dust before it enters the vacuum producer. All of these parts must be well designed and carefully installed.

ADVANTAGES AND DISADVANTAGES OF DUST-REMOVAL SYSTEMS

The advantages and disadvantages of the cleaning systems here described should be carefully considered before the equipment is installed. Sometimes the cleaning requirements may not justify the expenditure of a large sum of money for an expensive cleaning system; the saving in labor and insurance charges would not be sufficient to provide a fair return on the original investment. To be economical, the installation must reduce the number of men employed to keep the plant clean and also cut down the dust-explosion hazard enough to reduce insurance rates.

In small plants, which are cleaned only periodically by laborers or the regular employees during their spare time, brushes and brooms are generally used.

The advantages of the broom method—low initial cost of equipment, low cost of upkeep, low operating cost, and general adaptability to various conditions—are generally outweighed by its chief disadvantage—that the fire and dust-explosion hazard is greatly increased during sweeping. Moreover, it is difficult to remove the dust from corners, cracks, or crevices, with brooms; the collected material may be scattered by drafts over the section already cleaned. The dust thrown into suspension later settles, necessitating a second cleaning. Some method must also be provided for removing the dust from the building after it is swept up.

The greatest advantage of the floor-sweep system over the brush-and-broom method is the facility with which the sweepings are removed from the building and the fact that no additional labor is required for this work. Less sweeping is required because the inlets of the system are at points where the dust generally accumulates, making it unnecessary to push or sweep large quantities of dust for any great distance. The disadvantages of the floor-sweep system are practically the same as those of the broom method. Brooms or brushes must be used to sweep the dust to the inlet of the system. The light dust thus stirred up creates an explosion hazard and dust can not be easily removed from cracks, crevices, and corners. This system is the one generally used.

Although vacuum-cleaning systems have not been entirely satisfactory in the few grain elevators and feed plants where they have been installed, it is generally admitted that their failure has usually been due to defects in design and installation. The indications are that the newer installations in grain elevators will be satisfactory.

FLOOR SWEEP SYSTEM

The floor-sweep system (Fig. 1) the most common mechanical method of removing dust deposits and accumulations from a grain elevator, consists of air trunk lines which lead from fans, preferably outside the elevator, to all sections of the plant. Branch lines run down to the floor-level to floor-sweep hoods, into which the dust is swept. The fans exhaust into dust collectors outside the elevator. Sometimes these collectors are mounted on the roof of the dust house, far from the plant. In extensive systems the collectors discharge into a separate fan system, which conveys the collected material to a central collector on the dust house. This conveying system is usually outside the plant, for its use within the elevator might result in the propagation of a dust explosion from one section of the plant to another. For the same reason a small separate fan system is desirable to care for each section of the elevator.

The dust is swept, by either brooms or brushes, to the floor-sweep hood, into which air rushes at a high velocity. This air gathers up the material as it is swept into the hood opening and carries

it through the piping system. A floor-sweep system is similar to an air-conveying system of the low-pressure type, with the same principles of design.

INSPECTION TRAPS

Properly designed traps in the branch lines serving dust-collecting hoods place the application of suction under the supervision and control of an inspector, thus removing the suspicions usually encountered in applying suction.

The design of an inspection trap is similar to that of the large grain trap used in the main trunk lines of floor-sweep systems. The cross-sectional area of the expansion chamber should be at least 12 times as great as the area of the branch pipe in order to insure a velocity sufficiently low to permit the heavier material to fall to the bottom of the trap. The inspection trap, however, does not

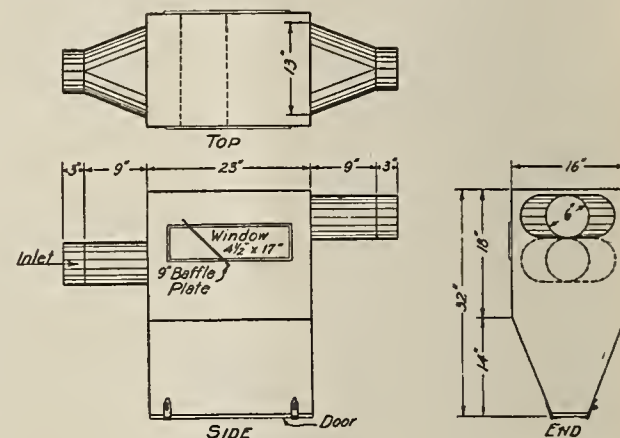


FIGURE 2

have a continuous discharge as in the case of the floor-sweep grain trap. The material separated remains on the bottom of the trap to indicate to the inspector the nature of the products gathered up by the suction. Access to the interior of the trap is provided by a door, which can be opened only by the inspector.

A trap designed and used successfully by the Underwriters Laboratories (Fig. 2) is usually installed in a horizontal run of the branch pipe to the hood. A baffle assists in making the separation. A trap of simple construction developed by the Bureau of Chemistry can be installed instead of an elbow connecting horizontal and vertical runs of piping, or it may be placed in a vertical run of piping by the use of another elbow.

DUST COLLECTORS

The metal cyclone dust collector is the most satisfactory type of collector for either a dust-collecting or low-pressure dust-removal system. These collectors separate the dust from the air by means of centrifugal force and air expansion. Baffle plates are usually placed within the collector to control the conditions within the collector necessary to effect a more perfect separation. The most suitable collector makes the best separation with the least back pressure on the fan. The larger the collector, the better will be the separation and the less the back pressure on the fan and the power consumed.

Under no circumstances should a collector be installed inside an elevator. It should be mounted on the roof of the dust house or at some other point. Each collector should have its individual exhaust pipe; a common exhaust line permits flame communication from one system to another and so constitutes an explosion hazard.

The exhaust of the collector should be covered with a hood designed to prevent the entrance of sparks. The dust-discharge opening should be large, so that the collector will not choke. A man-hole should lead to the interior of a large collector.

EFFECT OF DUST SUCTION ON GRAIN WEIGHTS

Observations have been made in various elevators throughout the country to determine what effect the use of suction as applied by modern dust-collecting equipment has on grain weights.

Tests were conducted by the Bureau of Chemistry in an export elevator equipped with a dust-collecting system that applied suction to the scale hoppers, garners, belt loaders, and boots. One of

*U. S. Department of Agriculture Engineers. This article is continued from Page 615 April 15 issue.

the scale hoppers was filled with No. 2 Hard wheat and weighed. The grain was then dumped and spouted into a storage bin, from which it was later transferred to a shipping belt to be elevated for reweighing. Four runs were made, two with suction and two without suction. The garner bin was swept clean before each weighing, and the first weight of each run was taken under the same conditions as the last weight of the preceding run. Four suction lines not connected to hoods acted directly on the grain: A three-inch connection at the belt loader, a three-inch pipe at the elevator boot, a six-inch line to the garner bin, and a six-inch connection to the scale hopper.

The shrinkage losses varied whether suction was used or not. On the whole, the shrinkage loss was slightly greater when the fans were not operating than when they were running. In two tests when the fans were operating, the total shrinkage loss was 140 pounds for a total weight of 232,600 pounds; in two other tests when the fans were not operating, the loss was 180 pounds in a total weight of 232,700 pounds. The largest shrinkage loss occurred in the second test when the fans were not running. The losses in all cases were low. The results indicate that the effect on grain weights when suction is applied is practically the same as in the normal handling of grain without dust-collecting equipment.

Preliminary investigations were conducted by the Bureau of Chemistry in 1918 in a number of terminal elevators to determine the quantity of dust collected while elevating carlots of grain. The results of tests on 39 cars showed an average of 7½ pounds of dust collected per car. Several cars in this lot contained very dusty oats and several others contained screenings. An average of 19 pounds of dust per car was removed from four cars of No. 3 White oats. In spite of the fact that these tests were made with 1918 equipment, which was not so designed that at all fan speeds it would be impossible to lift heavy particles from the moving grain stream, the quantity of dust gathered by the dust-collecting system probably would not exceed the natural loss incurred without dust-collecting equipment.

Recent tests conducted by the supervisor of the

trol measures are applied. In the one case the explosion hazard is greatly reduced with the removal of the dust to the outside of the plant; in the other case the explosion hazard is increased, with the gradual accumulation of dust within the plant.

GEORGIA CORN PROFITABLE

Corn may not be king in Georgia, but it is a profitable crop at that. The yield in that state averages from 12 to 25 bushels an acre, depending largely on the kind of soil on which it is grown, the variety of seed used and the method of cultivation. Dealers in Georgia grain know it to be of fair quality. This is set out in a booklet issued by the State Department of Agriculture, of which J. J. Brown is commissioner.

Originally corn was considered a crop to be grown in the valleys or "bottom" lands, and it was not believed that it could be raised in the northern and Piedmont sections. Modern methods of agriculture have demonstrated that those who take advantage of the soils and seasons may grow corn and expect a bountiful yield on the hills and plains as well as in the lowlands.

A MODEL OF EFFICIENCY

The plans for the rebuilding of Elevator "E" on the Milwaukee Road are taking concrete form, and the completion of the new plant along the most approved and strictly modern lines in time for this year's crop movement seems assured.

The Armour Grain Company has furnished *Doings in Grain at Milwaukee* with some of the plans, and we shall have further information from time to time as construction progresses.

It has been decided to add new concrete storage, amounting to 660,000 bushels, to the 650,000 bushels tank storage belonging to the burned elevator, which is already being used by the Armour Grain Company. The new workinghouse will have a storage capacity of 210,000 bushels, and besides that, concrete tank storage of 450,000 bushels will be added. The total storage capacity of the reconstructed plant will thus be 1,310,000 bushels. The

will be a bleacher leg, drier leg, and cleaner leg of large capacity.

The new storage will be equipped with two 36-inch conveyor belts above and two below. All cleaning machinery will be of the largest and most modern type, and will be located in cleaning bay half way up in the working house. The installation will include an Ellis Drier, and the latest Ellis Bleacher, largest type.

This new elevator will be designed as a fast handling house, using a minimum of space for the work it will accomplish. It will be operated by the Armour Grain Company with Albert R. Taylor in local charge. The Burrell Engineering & Construction Company, Chicago, is the builder.—*Doings in Grain.*

PORT OF HOUSTON'S NEW SUPERINTENDENT

When the new elevator of the Port of Houston, Texas, begins operations on June 1 of this year, the superintendent in charge of operations will be



GEORGE S. COLBY

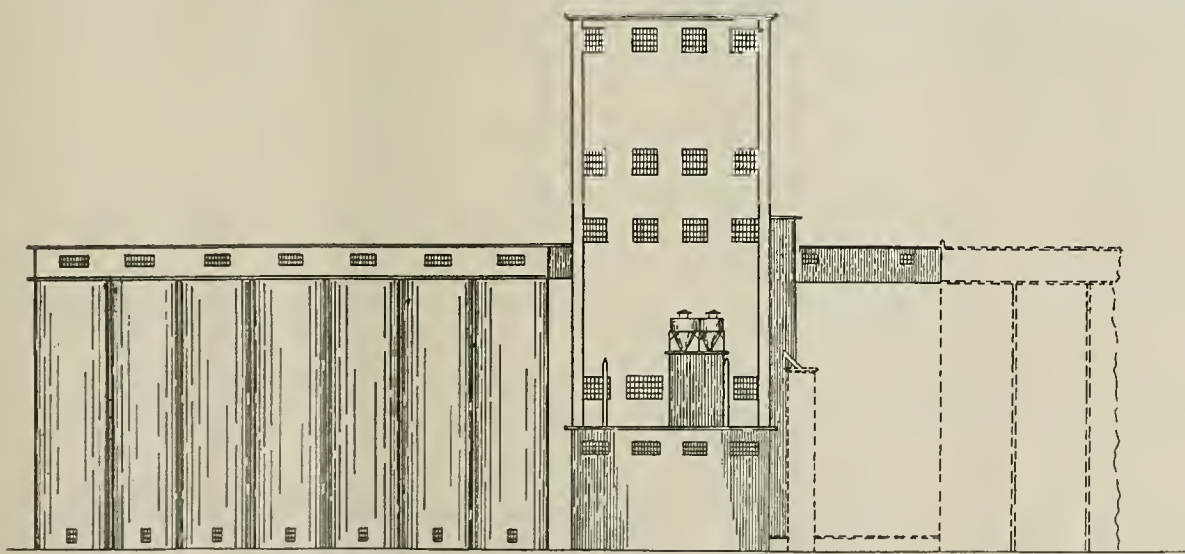
George S. Colby, who has been, for the past nine years, chief grain inspector and weighmaster of the New Orleans Board of Trade, Ltd.

Mr. Colby has had an interesting career, and as he has been judging grain quality for 35 years, besides the extensive executive training at New Orleans, his selection seems a most happy one for the new elevator which is expected to bear such an important part in the grain export business of the Southwest.

In 1890 Mr. Colby began his grain experience as a helper to the grain inspector for the Kansas City Board of Trade, and soon became an inspector for the Board and later for the State of Kansas when the State Inspection Bureau was established in 1897. He was in charge of the office at Coffeyville for two years, then returned to Kansas City as a private inspector, but after three years there went to New Orleans as grain inspector for Maritime and Merchants Exchange. In 1905 the Maritime Exchange and the Board of Trade inspection departments were consolidated and Mr. Colby was inspector, then assistant chief inspector and in 1917 chief of both weighing and inspecting all grain at New Orleans.

His new position finds him fit and ready, with a comprehensive background of experience and ripe judgment and a future of rare promise.

GOVERNMENT reports indicate that during the past month Argentine wheat shipments have been growing, and an increased demand from Europe is expected. The improved exchange and the generally better outlook are attributed to larger wheat exports.



CROSS SECTION OF THE PROPOSED ELEVATOR "E", MILWAUKEE, WIS.

Minnesota Railroad and Warehouse Commission in an elevator equipped with a dust-collecting system, designed and installed so that only the light floating dust is removed, showed the following results:

During the unloading of a car containing 50,000 pounds of flax screenings, 13½ pounds of dirt, refuse, and fibrous material were collected. In the unloading of another car containing 50,000 pounds of No. 2 Northern wheat, only 25½ ounces of dust were collected. These two tests were conducted on the extreme grades of material generally handled in a terminal grain elevator.

The quantity of dust removed by a dust-collecting system depends upon the design and upon the control of the air currents. If proper care is taken in installing the equipment, no more dust will be exhausted from the plant by a dust-control system than naturally settles when no dust-con-

new tanks, 15 in number, holding 30,000 bushels each, will be built on the opposite side of the elevator, as shown in the cut above, illustrating the south elevation.

The new elevator's unloading equipment will include two receiving legs and four track hoppers, capable of taking in a maximum of 60 cars per 10-hour day. The grain will be unloaded from the cars by four shovel machines set opposite each other, and two Peterson air-powered car door openers will remove the grain doors.

The shipping capacity will be 160 cars per day, with four loading spouts to vessels, and two shipping legs of 15,000 bushels' capacity each, a capacity on each leg of 80 cars per day.

The loading equipment will be such that the large lake carriers will be able to take on a full load in 10 hours.

Besides the two receiving and shipping legs there

Hints for the Elevator Millwright

"Big Bill" Studies the Possibilities of Converting a Grain Elevator Into a Mortar-Mixing Plant

By OLD TIMER

"WILLIAM," said Morris M. Marston, owner of the Square Deal Elevator at Massapoag Lake, "I've an option on the Bowtelle property, in Fairway. Suppose you run over there, look the property over and see what you think of it. There's a little elevator and a feed mill on the premises, and the feed mill is making just about money enough to keep up the elevator end of the business since wheat doesn't travel that way any more. You will find the elevator about a mile out of a city of 75,000 people, with four big towns, ranging from 5,000 to 15,000 people all lying within a few miles of it. There's a double track steam railroad running straight through, past the elevator, and straight across country, not more than 25 miles to Edmund Blood's place at Sandy Flat, where you helped to install gravel-handling machinery. The railroad will give us a good rate on sand shipments from Sandy Flat to Fairway, and perhaps you can locate a lot of good sand near there."

"But, what's the idea, Mr. Marston?" asked Big Bill Davis. "Why do you want carloads of sand at that wheatless elevator in Fairway?"

"There is a large amount of better class building going on there," replied Mr. Marston. "Brick and concrete buildings almost entirely, and every contractor in that vicinity is making mortar by hand, as required for his work. I have talked with a dozen or more contractors in Fairway and every one of them says he would be glad indeed if he could buy mortar, ready made, as needed, thereby saving the expense and trouble of keeping men and appliances for making it by hand as required."

"I hardly believe it would pay to keep the elevator storage bins or machinery, save enough to handle grain for the feed mill, which I believe can be enlarged a bit, some more machines added, and made to do a snug little business. But, Bill, I believe you would find it best to dismantle the poorest of the wooden storage capacity, use what you can of the material and machinery in the mortar-making plant, and advertise the rest for sale."

"What sort of a layout is used for mortar mixing?" asked Bill Davis.

"Go to Fairway, get a flivver and scout the country over. See some of the contractors and find out about how much mortar they would probably need from time to time. The roads are good around Fairway, and there will be no trouble in making truck delivery of mortar within 25 miles. Get a line on how much trade can be worked up in mortar, then, after giving the elevator property the 'once-over' and making yourself a sketch of the property go up to Chicago and look over one of the mortar-making plants there. Study the plant, and how they handle sand, lime and water; then come back here, dope out what you have learned at Fairway and Chicago and we will figure out whether or not it will be profitable to change the Fairway Elevator."

* * *

"Up at Fairway you sure have an option on a fine bit of property for almost any kind of business," said Bill on his return. "There's a railroad siding right through the property and instead of being a 'dead-end' siding, the track joins the main siding again after passing nearly the whole length of the elevator land, some 300 feet. This makes it possible to push cars to the elevator, unload them, and then kick them ahead again, out of the way, so that more loaded cars can be hauled up without first backing out the unloaded ones. The contractors will be glad to buy mortar, but they can't tell how much they will want."

"Well, what did you find up in Chicago?" inquired Mr. Marston.

"It will cost a whole lot of money to put in a plant like that but the investment will prove profitable, I believe. The sand comes in large open steel

cars and there is just room enough on the siding for two cars to be spotted. The mortar-shop is on one side, with room enough for eight or ten-carload storage on the other side of the siding. Close beside the railroad track, on its west side, is a short bit of railroad track, elevated about five feet, and on this track runs a gasoline-driven locomotive crane with a 50-foot boom and a two-yard clam-shell bucket with which the cars of sand are unloaded with the assistance of two men—one on the crane, the other in the car to trim with a shovel such sand from the corners of the car as the crane bucket is unable to pick up without such assistance.

"The sand-hopper is built right into the roof of the mortar-shop building, and holds about two carloads of sand. The locomotive crane, with its 50-foot boom, on its five-foot elevated track of its own, is able to toss sand in two-yard bucketfuls, either from the railroad cars direct, or from the sand-storage space, directly into the hopper on top of the factory. The sand drops from the long roof-hopper into a measuring box which holds enough sand to charge a batch mixer of the 'paddle' or pug-mill type. There is a cylindrical tank which holds the proper amount of water to be let into the mixer with the sand, and the proper proportion of hydrated lime is also put into the mixer, with the water and the sand.

"Only a few minute's running of the mixer is required to make a perfect blend of the mortar ingredients. Then a gate is opened in the front end of the mixer and the mortar is forced out by the paddles into a V-shaped trough or tank, about six feet long and four feet deep. Along the bottom of the big trough is placed a 10-inch helicoid conveyor, about 16 feet long, extending from the back end of the paddle mixer to the front end of the V-trough. Two of these troughs are provided, side by side, below and in front of the mixer, and the finished mortar can be discharged from the mixer into either one of the big troughs, thus permitting the mixer to run continuously, while there is room for two batches of mortar, which is run from the big trough directly by gravity, and urged by the helicoid conveyor, into a mortar-truck placed below the big trough.

"Lever-operated gates control the flow of mortar from mixer to troughs, and from trough to motor-truck tank-body, which is made of steel-plate and built-in upon the truck chassis in such a manner that the truck cannot very well be used for anything but mortar transportation. A lever-operated gate in the rear of each truck-body permits mortar to run out, urged, when the truck-body is nearly empty, by a shovel in the hands of the truck-driver.

"Lime is one of the meanest things to handle. I have built factories where they hydrated their own lime, and others where they used hydrated lime, and even that kind gave some trouble. In the mortar-factory they had a closed steel tank, containing a horizontal agitator or mixer-shaft. There were several little doors on top of the mixer, through which one of the workmen was continuously poking down into the lime inside, during the time of the trouble. I was unable to find out just what the trouble was, but it seemed to be the imperfect moistening and wetting of the dry lime after it was put into the horizontal lime agitator. They had a centrifugal, motor-driven pump which I presumed was to drive the tempered lime into the water tank above the batch mixer."

"How much mortar could they mix with that batch paddle affair and, how long did it take to mix a batch of mortar?" asked Mr. Marston.

"I couldn't get much of a line on that, Mr. Marston, on account of the lime troubles they were having, but I should say that they mixed the mortar in batches of about three-ton lots—if a smaller quantity was to be delivered, it would be drawn from the V-tanks into a truck. There were seven trucks

waiting for mortar, when I was at the factory, the waiting being on account of the lime-troubles. It requires no more time to mix a batch of mortar than concrete, and, with the lime apparatus working properly, it required but a few seconds to empty a mixer and charge it again with another batch, so there should have been an output of mortar of about three tons each five minutes."

"Did they have more than one mixer in that mortar-factory?"

"Yes, sir, there were three units—three mixers and six of the V-conveyor troughs. In front of the office door, where the trucks passed, was a platform scale, upon which the loaded truck was weighed before its driver received his delivery ticket for the load of mortar. Thus the mill product is all sold by weight. The entire group of machinery is electrically driven, the motors and wiring all being steel-enclosed so as to be absolutely moisture-proof. Each machine has a motor of its own and each pump, conveyor and agitator has its own motor. Therefore, any machine can be stopped or started without interfering in the least with any other machine. The machinery is rather expensive. A lusty locomotive crane, a fleet of eight or more motor-trucks, floor scale, three paddle mixers, six conveyors, a fleet of electric motors, some pumps, lime agitator and apparatus, and a raft of six-inch water piping to fill the three water measure-tanks quickly. I don't believe, Mr. Marston, that \$100,000 would duplicate the mortar-plant I saw, although a start could be made with a single unit—one mixer and two V troughs, and others added as required. But, even then, the outlay would be large, for the locomotive crane and the lime apparatus would be necessary, together with the pumps and piping necessary for the full number of mixer-units.

"But, I believe the income would be correspondingly large. Mortar mixing is a simple process, and skilled labor will be unnecessary outside of the factory manager, locomotive crane operator and the salesman. Even if the first cost be large, the profits can be surely estimated at 'cost plus 10 per cent for there will be no competition in the Fairway field.'"

"Well, William, what you have found, tallies pretty closely with what I have picked up. I believe it will pay us to put in a mortar-factory at the Fairway elevator," concluded Mr. Marston.

FORT DODGE VS. FORT WORTH

An agreement between grain shipper and buyer is binding, even though it is probable that the matter would have been handled differently had both parties to the contract had full knowledge of existing rules governing the transaction in question. This is the opinion arrived at by G. D. N. A. arbitrators after reviewing the complaint made by the O'Hearn-Bulpitt Grain Company, Fort Dodge, Iowa, against the Smith Bros. Grain Company, Fort Worth, Texas. The case grew out of the sale, September 16, 1925, by the O'Hearn-Bulpitt Grain Company of one car of No. 2 Yellow corn to Smith Bros., at \$1.15 group one Texas, five-day shipment.

The sale was made through the Blewett Grain Company of Fort Worth. The written confirmation of shipper read "Official grades good destination weights." The confirmation of the buyer read: "Destination weights official grades." While the broker's confirmation read: "Destination mill or elevator weights northern or Fort Worth official grades."

The car graded No. 3 Yellow corn at Fort Worth, and was rejected. The plaintiff, on receipt of information that the car was rejected, promptly wired the broker that he would divert the car, apply it on a different sale, and furnish Smith Bros. another car then in transit. The second car tendered the defendant graded No. 4 Yellow and was also refused. The plaintiff then tendered a third car to the defendant which was refused because it was shipped two days later than the contract time of shipment.

The plaintiff based the claim for loss on a clause in the defendant's confirmation reading as follows:

"All grain subject to customs and rules of Board of Trade at point of inspection and unloading (Fort Worth)." The Fort Worth rule requires the buyer to accept grain grading one grade lower than the contract at a reasonable discount.

In disposing of the case, the committee declared: "The plaintiff agreed to divert the first car and

furnish another within the time limit of his contract and of the grade called for under that contract. His failure to deliver under this new agreement, a car of proper grade and shipped in contract time certainly relieved the defendant. We find for the defendant and assess plaintiff with the cost of arbitration."

velopments occurred. Alaskans who believe there is any 200-bushel to the acre wheat are as rare now as gold rushers.

It is believed by Alaska farmers that the production of wheat can be extended there as fast as the increasing population makes it necessary, but it will be some time before there will be any appreciable export of grain crops because of the cost of transportation.

Developing Wheat in Alaska

Strains Developed in Alaska Show Good Yields and Highly Desirable Quality in the Hard Spring Varieties

TO THOSE folks of the United States who think of Alaska as a land of glaciers and wild men in search of mountains of solid gold, it might be a great surprise to know that there are many farms in the land where the raising of wheat is fast becoming a promising phase of agriculture. When the gold rush was at its height something over 30 years ago, C. C. Georgeson, was sent to Juneau by the Department of Agriculture to investigate the agricultural possibilities of the territory, and if he found any to develop them.

He was laughed at by the prospectors and traders whose thought was only of gold and who believed that Alaska had too cold a climate to raise any cultivated crops. Most of those early prospectors are gone, and if they found gold, that is probably gone too. But Mr. Georgeson remained there and has developed seed of grain, vegetables and fruit, so that Alaskan farms could support a population of over 3,000,000 people and have a surplus to export.

Among the developments were two strains of Hard Spring wheat—Chogot, which some years ago already yielded 27 bushels to the acre; and Romanous, which yielded 30 bushels. The latter is shown at the right in the picture on this page of experimental tracts of wheat on the Alaska Government Experiment Farm. The wheat at the left in the photograph is Red Fife.

The two principal strains which had been developed by Mr. Georgeson—Chogot and Romanous—grade as Hard Spring, and exhaustive tests have shown that they make flour which is the peer of the best made in America. Eleven acres of White oats at the Fairbanks station yield 778 bushels, an average of 70.8 bushels per acre, and barley has also done well, the seed having been brought from an altitude of 11,000 feet in Asia.

And now, near Fairbanks, a co-operative mill has recently been erected for the milling of the wheat raised in the Tanana Valley. In 1924 the wheat bought from the farmers was paid for at the price of \$2.70 a bushel, and opportunity was given the wheat raisers to buy flour at the wholesale price. In this particular section of the country 109 acres of wheat were under cultivation during the season of 1924, and from this acreage 1,465 bushels were threshed. The yield per acre is not definitely known, but averages around 20 bushels to the acre.

of the House of Representatives cutting the Alaskan appropriation for further development in agricultural lines, and it was felt in some quarters that the penurious policy pursued was decidedly ill advised. There is little doubt that Alaska will soon be entirely self supporting agriculturally and it is likely to eventually become an important exporting factor.

Old timers will probably remember the flurry which was caused in 1908 by persons claiming that a new wheat which would yield 200 bushels to the

black stem rust, it is susceptible to leaf rust. In planting such varieties—particularly those susceptible to a disease—every precaution should be taken to combat the disease. Where there is a treatment to prevent the disease it should be used. Kota wheat, for instance, should be treated for smut.

Other varieties of Spring wheat suitable for growing in Colorado are either resistant or susceptible to some of the more destructive diseases of wheat. Some of these are:

Marquis is comparatively resistant to covered



TRACTS OF WHEAT ON ALASKA EXPERIMENTAL FARM
Red Fife at the Left and Romanous at the Right—Spring Wheat



SACKING THRESHED WHEAT AS IT COMES FROM MACHINE



SIBERIAN WHEAT IN ALASKA: ESTIMATED AT 40 BUSHELS TO THE ACRE

Alaska has an area suitable for grain growing seven times as large as New Jersey, and an equal area that can be used for grazing. The station at Sitka has developed a hybrid wheat by crossing a Siberian Spring and the Canadian Marquis, which was early enough in maturity to develop at 65

acre had been developed in Alaska. Naturally, it did not take long for the Department of Agriculture and various other authorities on agricultural subjects to "scotch" this story. However, it did some harm at the time, and it was not until some years later that the really worth while de-

velopment occurred. Alaskans who believe there is any 200-bushel to the acre wheat are as rare now as gold rushers. It is believed by Alaska farmers that the production of wheat can be extended there as fast as the increasing population makes it necessary, but it will be some time before there will be any appreciable export of grain crops because of the cost of transportation.



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CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., MAY 15, 1926

LUTHER BURBANK

FOR the grain trade to claim special connection with the late Luther Burbank would be inappropriate, for his wizardous research gave him universal contacts with civilization. Yet his 20-year experimentation with wheat links him closely to the American grain world. So valuable has been his work in developing Burbank wheat, that steps are now being taken to assure a continuance of the work at Stanford University.

Pictures of Luther Burbank usually showed him smiling. The reason for this perhaps is found in one of his last declarations: "What a joy it is when you have made a close working co-partnership with nature, helping her to produce for the benefit of mankind new forms, new colors and new perfumes in flowers which were never known before, and fruits in form, size, color, and flavor never before seen on the globe, with grains of enormously increased productiveness, the fat kernels of which are stored with more and better nourishment, a veritable storehouse of perfect food—new food for all the world, untold millions for all time to come." Burbank's legacy to civilization is immeasurably great.

DUTCH SCHMIDT AND HIS PROTEGES

SIX girls and boys, under the direction of one Dutch Schmidt recently entertained 150 grain men at a banquet in Des Moines, Iowa. Most of the dancers and musicians were young. "Kids." What they lacked in talent, they made up for in youthful fire and naivité that com-

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Fourth Year

manded applause from start to finish. Twentieth Century youth, in every field from grain dealing to professional entertaining, is accepting responsibilities all out of proportion to its age, when compared to the responsibilities which were considered appropriate to youth a generation ago.

One grain dealer who had a "ringside" seat at the entertainment remarked, "When I was a kid you couldn't have forced any 16-year old girl or boy upon that platform at any price, let alone making them give a two-hour performance. They just didn't use to do it, that's all." They are doing it now, and getting away with it, thanks to the generous and skillful direction of older heads.

Don't underrate the possibilities of the young blood in your grain firm's organization. Your competitors are capitalizing the early maturing ability of their young men. Make the most of yours.

BREAD GRAIN FORECASTS

WINTER wheat production in the United States this year will amount to 548,908,000 bushels, an increase of 150,422,000 bushels over the amount harvested last season, but 8,754,000 bushels less than the average amount harvested for the past 10 years, according to the Government forecast of May 9. That the Washington crop appraisal is not too generous is suggested by estimates of Chicago statisticians who shoot considerably higher:

The Snow-Bartlett-Frazier report estimated Winter wheat production, based on May 1 conditions, at 554,000,000 bushels, and was lowest of the three reports issued. Nat C. Murray of Clement Curtis, estimated 573,891,000 bushels, while R. O. Cromwell of Lamson Bros. figured 558,836,000 bushels.

Rye production, as forecast from Washington, D. C., will be in a harvest volume of 44,791,000 bushels, as compared with 48,696,000 bushels last year and with 69,966,000 bushels for the 10-year average.

So much for the below-average crop prospects. In the Southwest, optimism prevails. Conditions above the 10-year average is slated for Kansas, the Pacific Coast, and a large southern area east of the Mississippi. Elevators in those territories are preparing to handle a record breaking business.

HAY IN THE ZOO

HAY traders should promote bigger and better zoos. One six-year old elephant eats a bale of hay every 24 hours. An older elephant takes two bales a day for its daily roughage ration. American zoos buy several hundred carloads of hay each season to feed the moose, yak, gnus, buffalo, deer, camels, elephants and other hay consuming inhabitants of the zoological gardens. Grain is also used in considerable quantities. American Alfalfa (second cutting), Timothy and Clover are the principal zoo hays, the Timothy being preferred by the elephants. No special feed or hay of any kind has to be imported to keep the animals in good condition. The African hippo takes Kansas bran, the Peruvian llama and the "sacred cattle"

of India eat Minnesota hay—with no questions asked.

At 10 a. m. and 3 p. m., feeding time at the zoo, an international tribute is being paid to American hay and grain. Getting spring fever? Make a trip to the zoo. Take the kids along. It will be a relief from farm relief.

CONGRESSIONAL RECORD

CALLING at the office of a co-operative marketing-excise tax enthusiast here in Chicago last week, a messenger was informed that his return from Washington, D. C., was not expected "until the Haugen bill is passed." That is our idea of an extended visit.

Grain dealers and their spokesmen at the national capital are remaining calm as the day for voting on farm relief draws near in the House of Representatives. The Haugen, Tinch, and Aswell bills have all been reported to the House by its Agricultural Committee, without recommendation. Subsequent amendments have only made the measure's chance for passage more lame.

On May 4, Mr. Haugen told Congress on the National Grain Dealers Association. He cited the detailed statement of Secretary Quinn as to how the McNary-Haugen bill was defeated through association work. Congressmen seemed in doubt as to whether they should take all that as a pro-Haugen argument. It was evident that in the last Congress, representatives for 16,000 voters (grain dealers) must have put up a better case in the lobbies than the representatives for 7,000,000 voters (farmers). The logic of the 16,000 triumphed over the vote appeal of the 7,000,000. The same thing is going to happen this year. Anyone who is waiting in Washington for the Haugen bill or any such measure to become a law, should take up a permanent residence there.

INDUSTRIES FOR THE CORN AREA

CORN sugar's status is still unsettled. The sugar interests who oppose the legislation that would place corn sugar on the same commercial standing with cane and beet sugar so far as the Food and Drugs Act is concerned, minimize the importance of the production of corn sugar in caring for any great quantity of our corn crop. They claim that a bushel of corn will only produce 20 to 22 pounds of sugar, which represents about 40 per cent of the corn, the remainder being made up of a small quantity of corn oil, gluten feed, corn oil cake, and corn cake meal. Since most of the latter products are used for stock food, they would go back into competition with the sale of corn for feeding purposes. In such an argument the fact seems to be overlooked that the demand for corn gluten and similar feeds is growing by leaps and bounds—as a supplement to and not a substitute for corn.

The expansion of corn products manufacturing is inevitable. Corn sugar, corn gluten feed, and last but not least, industrial corn alcohol are all products around which a growing industry is to be built in corn producing areas.

EDITORIAL
MENTION

The new wheat crop is already moving in, in Japan, China and Morocco.

From an agricultural joke to a \$5,000,000 farm crop. That is the transition recorded for corn in western Canada.

Having trouble with locomotive sparks? We would be glad to have reports from any elevator where control of this hazard is being neglected by the railroad.

Corn production in Italy has expanded, and may soon make that country proudly independent of corn exports. The question is, can Mussolini's chest expand any further than it now is?

No point in Iowa is over 12 miles from a railroad. Perhaps that is the trouble. It is too easy for Iowans to ship out their grain and be done with it, instead of making use of it industrially within the state.

Iowa ranks first in per capita wealth, family-owned automobiles, and in value of farm land and buildings, as well as in poultry, eggs, hogs and the well known tall corn. Now some Iowans want to be first in subsidy grants.

Six per cent of our nation's fire loss is charged to the smoker by a spokesman for the National Fire Protective Association. Probably 95 per cent of the rebuilding is done by smokers, of course, but not by careless ones.

If the British labor crisis grows more acute, the Government may again buy wheat direct as it did during the World War. Rumors have gone out that John Bull is already taking on consignments indirectly, but so far lack confirmation.

Feed grinding at elevators, because of its amazing growth of late, has been termed by some as a "craze." That is a misnomer. Feed grinding is a development founded on the incontrovertible evidence of thousands of feeding tests.

All United States grain exports except oats were much higher for the week ending May 8 than for the previous week. Yet, even with this upturn, the rye and wheat totals are miniatures beside the totals for the corresponding week in 1925.

Evidently the Alberta pool has forced the well known English grain firm, Spillers, Ltd., out of the Pacific Coast grain storage trade. The formation of this pool began in 1923, when Spillers also started great activity in the pool territory. Predictions were freely made that the pool movement would affect but a small volume of the crop, and that it would be short-lived. Events have proved these views fallacious. The pool has grown

in an amazing way. This has been due to the Canadians' feeling of obligation to a Canadian organization, rather than through any fault of the service rendered by Spillers. It is a patriotic rather than a pool triumph.

A new million-bushel wheat pool is being formed in Washington State. Western wheat pools have quite a loss and dissolution record to date. Western optimism is strong, though, and they go ahead on the theory that there's always room for one more pool.

The sun is setting on the day of whole grain feeding. Cracked corn and ground grain, straight and in mixtures of all sorts, are in such demand that elevator owners who were total abstainers from sidelines before 1926 are now ordering feed grinders in self defense.

Leaders in both houses of Congress are discussing the probable time of adjournment. That question admittedly depends on farm relief. If the House should pass one of the three pending bills this week, Senate resistance would place adjournment day well into hot weather.

Jack-of-all-trades is the name the farmer is earning for himself today. A farmers' co-operative organization for the manufacture of suits and overcoats has been organized by a group of sheep raisers in New York. Better leave the pants business to those with suitably arched noses, especially in New York.

Kansas Alfalfa is to be prominent among the exhibits at the Philadelphia Sesqui-Centennial Exposition from June 1 to December 1. A national hay exhibit, worthy of the event, gathered by the United States Department of Agriculture, will be among the drawing cards for members of grain and hay trade.

The painting season is on. "Clean-Up Weeks" are being engineered in hundreds of towns and cities. Grain elevators, conspicuous because of their height, should be among the first structures to get a new spring coat. Your plant's neatness and trade-bringing goodwill—don't ever think there's no connection.

With only two months remaining of the present wheat marketing season, it is certain that the total volume of shipments will fall heavily below that of the 1924-25 season. Last season the total exports of surplus producing countries were about 744,000,000 bushels. This season, the figure is so far 500,000,000. Another 200,000,000 bushels may be added before the fiscal year ends.

Is Liverpool primarily a dumping market? British grain dealers have recently asserted that it is not uncommon for wheat to be bought for less than its c. i. f. value on the current price basis in exporting markets. The question of how Liverpool prices are actually made and the feature of international arbitrage in the grain trade, is thoroughly

discussed in a long study prepared by the Food Research Institute. The publication will soon be available to the trade.

Shorts in May wheat are showing signs of nervousness. Possibly the Government's request for a list of traders with an open interest of 100,000 bushels or more in the May delivery has led to this feeling of unsettlement. Ordinarily names are required only for trades involving 500,000 bushels. The information sought is said to be for the benefit of the Chicago Board's Business Conduct Committee.

When a seller inserts a protective clause into a bill of lading, which deprives a buyer of his usual rights, without the consent of buyer, the seller must make good whatever loss the buyer sustains on account of the inserted clause. That is the just verdict of arbitrators on the controversy between two Kansas elevators. Arbitration committees are building up a codification of inter-grain-trade rules that will be of constantly increasing value.

The La Budde Feed & Grain Company of Milwaukee, Wis., has issued its yearly five-color chart showing the price trend of feed and grain. With no exceptions, the red lines, indicating the 1925 price course, are at lower levels when they terminate than when they begin (with the January quotation). Times have been worse, as evidenced by blue, yellow and green lines, representing prices for previous years, which sag considerably beneath the red. The Milwaukee and Chicago trade has come to look forward to these unique and valuable charts.

There were fires last year in 75 grain elevators equipped with sprinkler systems. Twenty-eight of these fires, or 37.3 per cent, were extinguished by the sprinklers. In 28 more cases the fire was held in check by the system. So the National Fire Protection Association gives sprinkler systems for grain houses a credit of 74.6 per cent "satisfactory performance." Only in 19 fires was the sprinkler performance termed "unsatisfactory." In more than half of these cases, the ineffectiveness was due to defective water supply or some such cause, for which the sprinklers should not, of course, be held liable.

Almost 216,000 tons of grain were transported by the Mississippi division of the Mississippi-Warrior barge line service during its last fiscal year. The Inland Waterways Corporation, which is the Government's operating agency for this barge service, suffered a total loss last year of \$65,000. Operation of the Mississippi division showed a profit, but the Warrior line, on which cotton is the main commodity, created the loss. What these Government accountants call a loss, some grain dealers would call a profit. Over \$89,000 was charged off for depreciation of equipment on the Warrior line. There's a lot of red ink in modern bookkeeping. Red ink is preferable to delusion.

W. H. TOBERMAN
St. Louis

NEWS OF THE TERMINAL MARKETS

LESLIE F. GATES
Chicago

PROPOSE NEW ST. LOUIS EXCHANGE

Members of the St. Louis Merchants Exchange are growing enthusiastic over the proposal to raze the Exchange's building and to replace it with a modern structure. No definite plans have been proffered as yet.

Construction of the present building was started in 1872 and completed in 1875 at a cost of \$2,000,000. When built it had the largest trading hall in the country with an unsupported ceiling.

A. R. TAYLOR IN NEW POSITION

On June 30 the resignation of A. R. Templeton as manager of the Armour Grain Company's interests in Milwaukee will become effective, and that responsible position will be taken over by Albert R. Taylor, one of the best known men in the Milwaukee market and who has been manager of the elevator department of the Armour Grain Company at Milwaukee for the last two years.

Mr. Taylor has been active on the Milwaukee market for about 25 years, serving the Chamber of Commerce in many capacities and as president in 1923-4. His first connection was with the Milwaukee Elevator Company and in 1906 the firm of Tagg & Taylor was formed. In 1916 Mr. Taylor became vice-president and secretary of the Taylor & Bourne Company, and in his latest capacity has had much to do with the design of the new elevator being erected for the Armour company by the Mil-



A. R. TAYLOR

waukee Railroad. In addition to the grain interests, Mr. Taylor will also manage the Mapl-Flake Mills, Inc., which is an Armour subsidiary.

SUCCESS AT NORFOLK'S TERMINAL

The outlook for Norfolk's terminal municipal elevator is decidedly encouraging, according to reports issued by Barton Myers, chairman of the City Port Commission. It will be remembered that the municipality cancelled its lease of this elevator to the Rosenbaum interests a short time ago. The elevator is well filled with grain and the prospects are that shipments will begin to arrive from Canadian territory shortly. E. J. Martin, former manager of the Rosenbaum interests at Norfolk, is running the elevator. Under the law by which the bonds were issued for its construction, the ele-

vator must begin operations on a paying basis this year to make it successful, and the operators have every hope that this will be attained.

GRAIN SHIPPERS ELECT

The Minneapolis Grain Shippers Association met early in April and elected the following officers to direct the activities of the Association during the year: President, R. C. Woodworth of the Concrete Elevator Company, succeeding Harry A. Murphy; J. R. Hessburg, Hiawatha Grain Company, vice-president; J. A. Gould of the Sheffield Elevator Company, secretary and treasurer; directors, A. L. Goetzmann of the A. L. Goetzmann Company and C. E. McCartney of the Purina Mills.

VOLUME OF GRAIN FUTURES TRADING IN APRIL

The trading in grain futures on the Chicago Board of Trade aggregated at total of 1,634,583,000 bushels during April, according to the report of the Grain Futures Administration. The total was divided among the different grains as follows, and for purposes of comparison the total of each grain for the month of March: Wheat, 1,208,957,000 bushels (1,647,196,000); corn, 270,427,000 bushels (294,824,000); oats, 117,083,000 (76,094,000); rye, 38,116,000 (37,031,000).

The average open contracts in futures at Chicago during April were for the different grain: Wheat, 96,935,000 bushels, as compared with 90,729,000 in April of last year and 95,431,000 last month; corn, 57,876,000 bushels, as against 65,755,000 in April 1925, and 59,434,000 in March 1926; oats, 46,132,000 bushels, compared with 66,556,000 in April of last year, and 50,350,000 in March of this year; rye, 13,177,000 bushels, as against 17,838,000 a year ago and 14,875,000 a month ago.

NEW OFFICERS AT BIRMINGHAM

Officers of the Birmingham Grain Exchange of the Birmingham (Ala.) Chamber of Commerce will be headed for the ensuing year by Alex Cecil, of the Alabama Mill & Elevator Company, elected president at the annual meeting held last month.

Other officers are: W. H. Adams, of Adams Flour & Grain Company, first vice-president; Ralph Bradley, of Bessemer, second vice-president; D. H. Nunnally, Tennessee Mill & Feed Company, third vice-president; F. B. Yeilding, of Yeilding Bros., treasurer, and O. L. Bunn, general manager of the Chamber of Commerce, secretary.

Board of Directors follows: J. C. Hodges, John W. Wood, Wade Wood, S. J. Knecht, W. C. Barcliff and J. A. Downey.

WOULD ABOLISH SAMPLE STATIONS

One item of particular interest to grain dealers was discussed at the annual spring meeting of the Northwest Regional Advisory Board held on April 27 at St. Paul. It was the proposal of the Northern Pacific, Great Northern and Soo lines to abandon sampling stations at Staples, Cass Lake, St. Cloud, Willmar, Sandstone, Thief River Falls and Glenwood, Minn., on May 16.

The railroads held that it was an expensive proposition to maintain these and to grant the privilege of stopping grain in transit for sampling. The advisory board, backed by the grain dealers and farmers, were averse to the abolishment of the sampling stations and discussed ways and means of lessening the expense to the carriers.

The matter was finally referred to a committee of five to be appointed, one representing the Minne-

apolis Chamber of Commerce, one the Duluth Board of Trade, one the country shippers of Minnesota, one the country shippers of North Dakota, and one the country shippers of South Dakota. This committee will work with the joint terminal grain committee to effect a settlement with the carriers.

W. J. HEINOLD HEADS BUFFALO CORN EXCHANGE

The annual election of officers of the Buffalo Corn Exchange for 1926-7, resulted in the selection of William J. Heinold as president; Henry W.



WILLIAM J. HEINOLD

Hudson, vice-president; W. E. Townsend, treasurer; and Fred E. Pond, secretary and assistant treasurer. For the three year term as directors, Henry W. Hudson, James G. McKillen and W. E. Townsend were selected. Harry E. Tweeden was elected for one year to succeed the late E. W. Husted.

SOME EXPERT DOPE

Nat C. Murray, statistician for Clement, Curtis & Co., of Chicago, in his monthly crop letter, dated May 5, gives some interesting general conclusions regarding forecasts that are of value.

In the 14 years that the Government has made forecasts in bushels, of the Winter wheat crop, the May 1 forecasts average 559 million bushels and the final figures average 561 million, which is a close agreement. Individual years show more or less difference between the May 1 forecast and the final. In seven of the 14 years the final was higher than the May 1 forecast, and in seven years lower. The average divergence was 41 million bushels. In seven years the final differed from the May 1 by more than 29 million bushels and seven times by less than 29 million bushels. We may therefore regard it as about an even chance that the final outturn will be within 30 million bushels of the May 1 forecast.

This spring is later than the average, which prompts the question as to the relation between the earliness or lateness of the spring, and the ultimate outcome of crop yields. A study has been made of the past 25 years and it is found that general crop yields have averaged slightly larger in

years of late springs than in years of early springs. But the difference is not material. In 1912 the spring was the latest on record, and crop yields averaged the highest on record up to that time. The year 1920 is also outstanding for its late spring and high final yields. In general we may regard the earliness or lateness of the spring as of little value as an indication of final outcome of crop yields.

GRAIN FUTURES IN NEW YORK

Members of the grain trade on the New York Produce Exchange were greatly gratified last month to hear that the campaign for the re-establishing of trading in grain futures was making excellent progress due to the excellent work of the special committee consisting of A. Hansen, chairman; Robert Straub, Fred. Teller, M. B. Jones, C. A. Robinson, B. F. Schwartz, and A. L. Russell. The resumption of trading has been under consideration for some time and it is hoped that business can be started in time to participate in the marketing of the new grain crops. The proposition is to trade in contracts providing for delivery at Buffalo. This is a desirable arrangement for members of the export trade as it will give the buyer of the grain the choice of export routes from Montreal to New-
port News, while on wheat for milling there is the opportunity for the tremendous milling trade of Buffalo, eastern Ohio, New York State, Pennsylvania, Maryland and the East generally. Grain can be stored at Buffalo and distributed either for export or milling in a most effective way with a sale of the New York contracts, with delivery at Buffalo, making a complete hedge against the grain. In the same way the purchase of a New York contract for delivery at Buffalo will carry with it the immense opportunities for distribution for export and milling. Harmonious plans have been worked out with the Buffalo elevator interests. The committee is working on further details of the plan and of a clearing house for handling the business. It is anticipated that the plans will be completed by July.

VANCOUVER GRAIN TRADE DISAPPOINTING

By C. H. BROOKS

Although grain shipping interests in British Columbia had expected that 1925-1926 season would be their banner year for the movement of prairie wheat westward by the Pacific Coast route, they have been disappointed, and while the season still has several months to run it is not anticipated that the record will reach anything like the figure that had been counted upon.

Vancouver was never so well equipped as now to handle a large flow of grain, having five elevators with a capacity for accommodating 205,000 bushels an hour, or 4,100,000 bushels daily in the aggregate. Unless present signs are deceptive, however, only about 50,000,000 bushels of wheat will come through this port during the season. "The prospects are particularly black when one considers that Vancouver could easily handle the entire prairie crop this year if necessary," said a prominent shipping man. "As matters stand at present, however, we will get only a small share of the crop."

"If there was a demand for it, Vancouver could load 20 average cargoes of 6,000 short tons, or 200,000 bushels every hour. More than one Vancouver elevator can look after four ships at a time and has a loading capacity of 60,000 bushels an hour. The port could handle 13 ships with an aggregate of 205,000 bushels an hour. The holding capacity of the five elevators is 6,700,000 bushels."

In spite of all this equipment, which has necessarily been standing idle almost all year, only about 26,000,000 bushels have so far gone through the Vancouver spouts. Victoria and Prince Rupert are both building elevators in the hope of getting their share of the trade in future, but unless this materializes to a larger extent than at present the prospects are not particularly bright.

However, those in the trade declare that the conditions at present governing the situation are temporary and that there is sure to be an adjustment within a few months that will result in a larger

proportion of the grain going away by way of the coast. Negotiations are still in progress for reduction in freight rates, but the coast's handicap is not entirely wrapped up in that issue.

Much of the coast's disadvantage lies in the variation in cash grain premium as between Vancouver and Winnipeg. This year purchasers of cash grain have had to pay as high as 11 cents per bushel over the concurrent Winnipeg quotations for the same grade, while at no time since January 4, when trading for the year began, has the difference been less than 3½ cents for either of the principal grades, while the average has been about 5½ cents.

Vancouver shippers are emphatic in declaring that the reduction in grain volume has resulted from inadequate elevator accommodations and speed in handling. On the contrary, they point out that the dispatch has been so prompt here that a bonus of one shilling to one shilling six pence per ton is being paid on cargoes routed by way of Vancouver as compared with Fraser River, Puget Sound, or Columbia River ports.

CHICAGO BOARD GETS A WAR TROPHY

The main floor of the Chicago Board of Trade has assumed a rather military aspect during the last month due to the installation of a grim war



CHICAGO BOARD'S NEW TROPHY—A GERMAN MINE-THROWER
Left to right: A. C. Hennig, A. J. Bailer, K. B. Pierce, H. W. Ewert

trophy. The 250 millimeter Minenwerfer (mine-thruster) is shown in the illustration on this page and is the only trophy of its kind in Chicago, though some of the nearby towns have received similar ones from the War Department. A. C. Hennig, finance officer of the American Legion's Board of Trade Post informs us that there are no authentic records available to indicate which of the German troops had this particular mine-thruster, though it is known that it was captured by the Allies at Chateau Thierry.

The photograph shows a number of Legion officers with the Minenwerfer. The two men in the center are well known members of the Board—A. J. Bailer, who is vice-commander of the Legion post, and K. B. Pierce, who is commander. On the two ends are employees of the Board—left, "Gus" Hennig, who is familiar to the men on the terminal market as the assistant chief of the Board's special police, and is finance officer of the Legion post, and at the extreme right, Harry W. Ewert, of the weighmaster's department and secretary of the Weighmaster's National Association, who is past commander of the post.

INDIANA CONDITIONS PROMISING

In a recent letter the Crabbs Reynolds Taylor Company of Crawfordsville, Ind., says:

Corn: Plowing is probably three-fourths completed. There are a few small fields all planted. Acreage will be about normal if planting is not delayed. Some of the larger farmers expect to get started planting the first of the week. Receipts of old corn have been very light on account of the farmers being busy in the fields. We have had four or five cars of corn to arrive in a heating con-

dition this week. The moisture, however, is ranging around 18 per cent but there seems to be enough wet damaged grains together with the germination period to make the corn heat.

Wheat: Some fields look spotted but generally it is showing good growth. A good soaking rain would be very beneficial. Practically all the old wheat has been sold.

Oats: Farmers have been feeding oats heavily and we do not look for a large movement until the new harvest. In this part of the state there is very few in the bins. New crop doing fairly well. Some fields will be replanted to corn account of poor seed oats. Acreage normal.

BUFFALO MARKET DULL

The past month has been marked by exceptional dullness in the demand for grain in this market. The delayed opening of lake navigation failed to clean out elevator stocks of corn and oats, and with vessels finally arriving from the upper lakes it is expected local elevators will soon be well filled up again.

Eastern jobbers while having sufficient grain on hand for their immediate requirements are not generally stocked up nor are they booked ahead to any great extent, and for this reason a steady demand is looked for during the next few weeks, with nothing in sight at the moment to cause any material change in the price level.—Letter of May 12 from J. G. McKillen, Inc., Buffalo, N. Y.

DENVER ELECTS

Members of the Denver Grain Exchange at the recent annual meeting elected the following officers for the ensuing year: Robert P. Quest, vice-president of the Denio-Barr Milling & Grain Company, president; R. C. Johnson, first vice-president; O. M. Kellogg, second vice-president; H. G. Mundhenk, secretary and traffic commissioner.

Mr. Quest succeeds O. M. Kellogg who has been president for the last year.

CORN ABSORBED AT DES MOINES

The industry demand for corn in Des Moines is absorbing the very light shipments at better than terminal market prices. The indifference on part of the oats consumers is quite as pronounced as the indifference shown by the producers, resulting in extremely light trade.

Crop conditions favorable; small grain showing well and corn planting progressing rapidly. A good general rain would be welcomed by all.—From a recent letter from Lee Lockwood, Des Moines, Iowa.

CONDITIONS GOOD IN PEORIA

The Peoria market on corn has been a large and usually satisfactory one for the shipper during the entire winter. We have had some runs of large receipts which, as a rule, were taken care of at prices equal to or better than other competing markets for the same class of corn. Up to a few days since the arrivals have been liberal, and with the exception of the highest grades, brought relatively more money than values in other markets.

For several days past the arrivals at Peoria have been exceedingly light, and while the industries had liberal supply in store, the time has come when we must have a better supply to take care of the more than 70,000 bushels daily requirements for industries alone—besides we have occasional spots when shippers are in line.

It is quite likely that as the corn planting progresses that there will be a better movement at country points. In the meantime we will have some arrivals from other points of accumulation. We don't believe there is any better place for points that are at all tributary to Peoria than this market for all sorts of corn and especially if it is below the grade of No. 3. It looks as if the demand would continue indefinitely.

The arrival of oats have been quite light for a long time. However, during the past several weeks our market has been quite busy getting rid of the million and a half bushels of oats that were in winter storage here and while the demand was not what could be called large yet it was sufficient to

keep the oats moving until now the stock is just about exhausted.

We have a good demand for oats practically all the time and usually at prices that are well in line with other markets. While it is dull right now the situation is hopeful and we expect to have a good amount of business beginning very soon.—P. B. & C. C. Miles, Peoria, Ill., in letter of May 13.

CHANGES IN MEMBERSHIP

Chicago.—The memberships of the following on the Board of Trade have been transferred: Julius Rosenfeld, Joseph S. Hedgpeth, Roscoe Rockwood, Walter C. Hicks, Fred C. Sawyer, Vivian Vick, Estate Robert Stuart, Estate George Simpson. The following were admitted to membership: John J. Meany, Lewis B. Hall, Jr., Albert Curtis Walker, James Oscar Williams, Gerard C. Henderson, John P. Bickell, John W. Jordan and Julian E. Baker. George O. Stremmel was expelled from membership. Reported by Secretary James J. Fones.

Montreal.—The following have been elected to membership in the Corn Exchange Association since January 1: A. E. Booth, Guy Pettigrew, J. E. Pollard, Thomas Robb; C. E. Bickerdike, George A. Cairns, Harold C. Moore, George C. Fletcher, C. E. Racine, J. H. Payette. Reported by H. C. Beatty.

TERMINAL NOTES

Business has been discontinued at Toronto, Ont., by Clark & Clark, grain and flour brokers.

A grain and feed brokerage business has been opened at 319 Chamber of Commerce, Buffalo, by Harry J. Hannan.

The F. J. Taylor Grain Company of Omaha, Neb., has moved its offices to the seventh floor, the grain trading floor, of the Grain Exchange.

E. F. Beyer of the Beyer Grain Company of Wichita, Kan., recently returned from a four months' trip to Cuba, Panama Canal Zone and California.

W. B. Fox is filling a vacancy on the Board of Directors of the New Orleans Board of Trade. Mr. Fox is associated with the C. B. Fox Grain Company, Inc.

The offices of J. S. Bache & Co., Chicago grain merchants, have been moved from the Woman's Temple, which is being torn down, to 231 S. La Salle St.

Eugene Blackford sailed on April 10 for a two months' trip to Europe. Mr. Blackford is chairman of the Executive Committee of the Baltimore Chamber of Commerce.

P. Wolfe was recently elected president of the Calgary, (Alta.) Grain Exchange. S. W. Metcalfe was elected vice-president, and C. McHugh was re-elected secretary-treasurer.

The new offices of Colvin & Co., grain commission merchants and stock brokers, of Chicago, are now in the New York Life Building. They were formerly at 104 South La Salle St.

The Start, Johann Grain Company which has been operating on the Chicago Board of Trade, has been dissolved. Edward N. Johann, a member of this company is now doing business in his own name.

C. M. T. Stevenson a grain broker of Minneapolis, Minn., and H. A. Rumsey, president of the Chicago commission house of Rumsey & Co., have been elected to memberships in the Winnipeg Grain Exchange.

Offices are now occupied in the Chamber of Commerce Building at Buffalo, N. Y., by the Leeson Grain Company. W. L. Stephens, formerly sales manager of the Churchill Grain & Feed Company, is manager.

The fiftieth anniversary of the Jackson Bros. & Co., grain and stock brokers of Chicago, was celebrated on April 15. Friends of the company filled the Jackson offices with flowers and sent congratulatory messages.

William H. Chandler is the first man to be elected honorary member of the Boston Chamber of Commerce under the new ruling of the Board. Mr. Chandler was former transportation manager of the

Boston Chamber of Commerce and now holds a similar position with the Merchants Association of New York City. He was given the honor in recognition of valuable services he has rendered the grain and flour trades in a legislative way.

Three Federal judges have taken under advisement the question of the right of the State of Missouri to levy a 25 cent tax on every deal in grain futures. This followed suit brought by the Kansas City Board of Trade.

The announcement was recently made by the Cargill Grain Company, Minneapolis, Minn., of the election of Harold E. Tweeden as vice-president. Mr. Tweeden will have charge of sales, with headquarters in Buffalo, N. Y.

E. L. Brown has resigned his position as manager of the Minneapolis office of James E. Bennett & Co., Chicago grain house. He is succeeded by F. E. Beaupre, formerly assistant manager. William J. North takes Mr. Beaupre's place.

George S. Jackson has resigned as the representative of the Baltimore Chamber of Commerce on the Baltimore Criminal Justice Commission. Mr. Jackson was formerly head of the Barnes-Jackson Company, Inc., grain exporters.

The New Orleans Association of Commerce has asked the Texas & Pacific Railroad to defer the demolition of the Westwego Elevators. The request is based upon the prospect of an exceptionally large grain movement this year.

At a recent meeting of the Clearing Association on the Milwaukee Chamber of Commerce, Frank J. Phelan was elected president. Other officers elected were: A. L. Flanagan, vice-president; W. A. Hottensen, treasurer; J. J. Lers, secretary.

J. George Mann is now president of the grain and milling division of the Minneapolis Traffic Club, Minneapolis, Minn.; O. W. Galloway is vice-president; and Lee Kuempel, secretary-treasurer. Mr. Mann is connected with Northrup, King & Co.

One of the oldest grain houses in Baltimore, the Daniel Rider grain and feed business, located at 853 Greenmount Avenue, has been incorporated as Daniel Rider, Inc. W. Whitridge Rider, J. W. Arbin and O. W. Albrecht are named as the incorporators.

Arrangements have been completed by the Kansas City Board of Trade for supplying continuous quotations for the Omaha Grain Exchange. It will start as soon as the Omaha Exchange completes facilities for receiving and posting the quotations.

The St. Louis Merchants Exchange will be represented at the National Chamber of Commerce Meeting at Washington from May 10 to 13 by Charles E. Valier. George C. Martin, Jr., is counselor and F. B. Chamberlain and Woodson K. Woods, alternates.

A Philadelphia wrecking company recently completed raising the floating grain elevator *Commonwealth*, owned by the Reading Company which was submerged on November 16 in the Delaware River. The elevator was towed to Camden for survey and repairs.

A complete line of grain, flour and feed is again being handled by M. H. Hay & Co., of Atlanta, Ga., brokers. The company a few months ago announced its intention of discontinuing handling everything but hay but has added its old brokerage lines again.

Henry A. Rumsey has been elected to membership in the Grain Exchange at Winnipeg, Man. Mr. Rumsey is now a member of the Chicago Board of Trade, the Baltimore Chamber of Commerce, St. Louis Merchants Exchange and the Sioux City Board of Trade.

The Kansas City Board of Trade is to present a silver cup as a trophy to the best student rifle shot at the citizens' military training camp to be held this summer at Fort Leavenworth, Kan. This follows the precedent set by the Board of Trade some years ago.

The Coffeyville Grain Products Company was recently organized at Coffeyville, Kan., and will take over the business of the Grigg Grain Company of Kansas City, Mo. C. L. Allan, formerly in the sales

department of the Rea-Patterson Milling Company, bought a half interest in the Grigg company and with W. W. Grigg makes up the new company. The new firm will operate the mixed feed plant of the Grigg company as well as the corn mill.

On May 1, Lester Howard resigned his position with the C. A. King & Co., of Toledo. His friends on the Produce Exchange presented him with a tin loving cup, followed by a real present of a gold pen and pencil. Mr. Howard will enter the bond business as salesman.

A new Publicity Committee has been appointed on the Milwaukee Chamber of Commerce to consist of Carl A. Houlton, chairman, E. J. Koppelkam, J. J. Murphy, John C. Hensey and H. A. Plumb. The committee will have charge of the Chamber's publication *Doings in Grain*.

The Baltimore Chamber of Commerce has its seventy-first annual report ready for distribution. The book contains the latest rules and by-laws of the organization together with statistics on the production and movement of grain and a classified list of its members.

Dean, Onativia & Co., of Chicago, Ill., has announced the opening of a branch office in the new South Water market. This firm is among the first of the Chicago grain commission houses to establish an office in this district. Edwin T. Keefer, Jr., will be manager, assisted by Grant Yost.

George E. Pierce, Frederick G. Pierce and Florence V. Stanley are listed as the directors of the recently incorporated Pierce Grain Corporation of Buffalo, N. Y. The firm is capitalized at \$50,000. The company will do a cash grain business and will have offices in the Chamber of Commerce Building.

A recommendation has been made to the St. Louis Merchants Exchange by the members of the St. Louis Grain Club, that a dual standard of delivery be adopted, with contracts for both Hard and Soft wheat. They also recommend the change of the contract grade of corn from Mixed corn to Yellow corn.

A Kansas City office is being opened by the Continental Grain Company, large New York City grain exporters. The company has bought two memberships in the Kansas City Board of Trade, taking over those of T. B. Armstrong and B. M. Huffine. Samuel Carlyle, formerly of St. Louis and Omaha, will be in charge.

At a recent meeting of the Plainview Grain Exchange of Plainview, Texas, Walter A. Barlow and Arthur G. Hinn were elected to membership on the Board of Directors. Mr. Barlow is general manager of the Great West Mill & Elevator Company of Amarillo, and Mr. Hinn, general manager of the Harvest Queen Mills of Plainview.

The Trans-Mississippi Grain Company of Omaha, Neb., has leased the Buchanan Elevator of 1,000,000 bushels' capacity, located on the Union Terminal Railway tracks at St. Joseph, Mo. R. E. Wiese of Omaha will go to St. Joseph as the manager there of the Trans-Mississippi Grain Company and will conduct a general grain business in that city.

The Chicago Board of Trade Fellowship Club at its recent annual meeting elected the following officers: President, A. J. Weinert; vice-president, W. B. Fenton; financial secretary, Doc Bacon. Roy McNellis, James Scott, John Hopkins, Harry Johnson, Clyde Parry, James O'Connell, Tony Otto, C. O'Connor and Jack O'Connell were elected directors.

A five-year lease has been secured in the Old Colony Life Building, Chicago, Ill., by the Farroll Bros., stock and grain brokers. The partnership has also obtained a five year-lease on the entire lobby space adjoining the hall and lounging room of the New Morrison Hotel Building and will use the latter as a branch office when it is equipped for the purpose.

A new company, recently incorporated at Winnipeg, Man., under the Dominion Companies Act, to be known as the Alberta Pacific Grain Company, Ltd., will soon take over the property recently bought by the Royal Securities Corporation from

the Alberta Pacific Grain Company. James Stewart of Winnipeg is president; other members of the Board of Directors are: C. W. Band, D. A. Campbell, J. C. Gage, A. C. Michael and F. W. Riddell. R. Riddell will be managing director of the new company.

The private wire service of the Davis-Noland-Merrill Grain Company of Kansas City, Mo., has been extended into the interior Southwest with office at Enid, Okla. This office is now in charge of Claude Nicholson, of the former Nicholson Brokerage Company. The company also maintains private wires from Kansas City to Fort Worth, Texas, and Salina, Hutchinson and Wichita in Kansas.

TRADE NOTES

The John S. Metcalf Company, engineers and constructors of grain elevators, have moved from the building at 108 South La Salle Street, Chicago, where they have been located for many years, and which is being torn down to be replaced by a larger building. The new location of the Metcalf company is at 111 West Jackson Boulevard, Chicago.

The O. W. Randolph Company of Toledo, Ohio, manufacturers of Randolph Direct Heat Grain Driers, is finding that both terminal operators and country houses are realizing the advantages of taking the moisture out of grain before shipping. The demand for both large and small sizes is keeping up at a most satisfactory rate and the factory is busy on orders.

The Huntley Manufacturing Company of Silver Creek, N. Y., makers of the "Monitor" line of machinery for elevators and mills, announces that it will move to its splendid new factory at Brocton, N. Y., about July 1. The new plant has about 70,000 more square feet of floor space than the Silver Creek plant, and it will all be needed, as the demand for Monitor machinery has made the old factory inadequate. The shipping facilities at Brocton are superior to the old also with switches from the factory yard to the lines of the New York Central, Nickel Plate and the Pennsylvania Railroads. In its new quarters at Brocton the Huntley company will be able to take care of any order promptly, no matter how large it may be.

The first three months of the year are usually the lightest for the Fairbanks, Morse & Co., Chicago, manufacturers of scales, power plants, motors, etc. During the winter months elevators are usually carrying large stocks of grain, mills are busy, and neither starts contemplated improvement of equipment until later. But this year the business of Fairbanks-Morse for the first three months registered an increase of 17 per cent over the same period a year ago, and approached in volume the later quarters of former years. Orders on hand show a substantial increase over last year, so that 1926 bids fair to be the most prosperous in the company's history. Certainly an amazing number of elevators have become acquainted with Fairbanks-Morse scales and with their power plant installations.

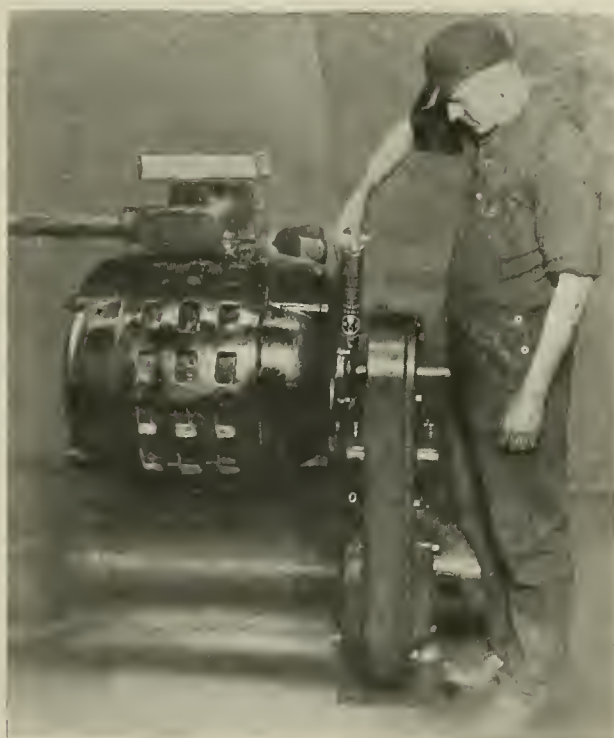
The Polk Genung Polk Company of Fort Branch, Ind., has just issued a new illustrated booklet which has several points of distinction. In its make-up and typography it is most attractive and the illustration of some of the reinforced monolithic concrete elevators, coal pockets and "Conirib" chimneys, which the company has built recently, are unusual examples of the engravers art. But more imposing still are some of the testimonial letters contained in the booklet from well-known firms who have tried out the Polk-Genung-Polk storage and have found it most satisfactory, if we can judge from the enthusiastic but sincere tone of the letters. In addition the booklet contains tables on capacities of tanks of all sizes and some convenient tables and useful rules. It is a book well worth having for anyone contemplating building grain or coal storage.

GREASE-TUBE FOR MOTOR LUBRICATION

Proper lubrication of motors was always a vexatious problem until it was greatly simplified through the advent of the ball-bearing motor with its inherent low bearing friction. Fairbanks, Morse & Co., of Chicago, were the pioneers in developing the ball-bearing motor and they have demonstrated during the past 15 years that by use of a suitable grease the lubrication of this motor is reduced to a 20-minute job once a year.

Now they have introduced another improvement that further simplifies motor lubrication. It is in furnishing the proper greases in collapsible tubes, each containing just enough grease for a motor's annual requirements. After flushing out the old grease with kerosene as directed in printed instructions supplied with the tube, the new FMCO grease is squeezed from the grease tube directly into the bearing. The directions show just how much to put into each bearing for the best results. Four sizes of tubes are available for corresponding sizes of bearings.

There are many advantages in this tube method of greasing. The kind of grease best adapted for



METHOD OF USING "FMCO" GREASE TUBE FOR LUBRICATING FAIRBANKS-MORSE BALL-BEARING MOTORS

ballbearing is used. It is of the proper adhesiveness to cling to the balls; it maintains its consistency through all normal temperatures without being too stiff when starting in the cold, or melting and flowing out of the bearing when running at full load. It is free from gritty or corrosive constituents. No dirt or other deleterious matter is introduced into the bearing. The likelihood of using a stick or other random object of questionable cleanliness, of taking grease from an open can to the bearing is entirely eliminated. The cap of the housing is not removed, only the plug. No grease, no wiping is needed. Just the right amount of grease required for the most perfect lubrication is used in each bearing.

It must not be assumed, because the grease is furnished in tubes, that this is an expensive method. It is actually found that the slight cost of the tubes is usually offset by the elimination of waste in the use of grease. This refined method of greasing therefore secures both economy and convenience in lubrication and maintains the efficiency of the bearing at its highest point.

JUDGES SPLIT ON GRAIN CASE

It must not be the amount, which is \$131.60, but rather the principle involved that has upset the unity of the G. D. N. A. Arbitration Committee No. 4. E. W. Crouch and E. Wilkerson take one side of the fence in the case of the Mid-Continent Grain Company vs. the Smith Bros. Grain Company, while

Thomas F. Connally assumes an opposite position now that the case has been reviewed.

The controversy grows out of the sale by the Mid-Continent Grain Company, of Kansas City, Mo., to Smith Bros. Grain Company, of Fort Worth, Texas, on September 8, 1925, of one car of sample wheat at \$2.50 a hundred pounds. The only question in dispute is whether this wheat was sold Kansas City weights and grades to be final, or whether it was sold guaranteed to arrive cool and sweet at destination.

The Mid-Continent Grain Company after receiving Smith Bros. Grain Company's written confirmation which reached them on the tenth, immediately handled it by wire with Smith Bros. Grain Company, advising that the terms were Kansas City weights and grades, and Smith Bros. Grain Company replied that they could not use the car unless guaranteed to arrive in a cool, dry and merchantable condition. To this the plaintiff replied that if defendant could not use the car, they would sell it out for Smith Bros. Grain Company's account. This wire was sent on the tenth. Getting no reply to that wire they acted on their rights in the matter on the eleventh, tried to find a buyer at group two Texas, and not succeeding, sold the car at public auction on the floor of the Board of Trade, which sale was conducted by the Kansas City Board of Trade under their rules. The majority decision reads in conclusion:

Smith Bros. Grain Company in their argument attack the price obtained for the wheat on this auction sale on the Board in Kansas City, and while it is true that this car of wheat sold on the Board for very materially less than the contract price between the parties to this arbitration, there is no evidence offered that the sale was not made in good faith or that any fraud was committed. Without such evidence, this Committee concludes that this sale was conducted in good faith, was made for the account of Smith Brothers Grain Company, that the loss on the car was \$131.60 and finds that Smith Bros. Grain Company is indebted to the Mid-Continent Grain Company of Kansas City in the amount of \$131.60, and assesses the defendant with the costs of arbitration.

Mr. Connally, dissenting, asserts that at no time did Smith Bros. think they were buying what the Mid-Continent thought they were selling. Under those conditions, he declares, "no contract was ever entered into."

SWEDEN AND NORWAY TO REGULATE GRAIN TRADE

Both branches of the Swedish Parliament have passed a bill providing for a grain import certificate system, according to cable dispatches received by the Department of Agriculture from W. A. Schoenfeld, Agricultural Commissioner at Berlin.

The system, Doctor Schoenfeld says, will be similar to that in effect in Germany and will permit free importation of wheat or rye on presentation of certificates showing that an equal amount of wheat or rye had previously been exported. Certificates in Germany are issued to exporters of grain and are transferable, which makes it possible to export rye or wheat from the eastern provinces and import wheat into the industrial districts of the West without payment of duty.

A bill in the Norwegian Parliament, Doctor Schoenfeld reports, proposes a grain purchase and distribution monopoly. The monopoly would have power to buy domestically produced grain at higher prices than import grain. The measures are considered unfavorable to continued imports of grain from Germany and Poland, with the subsequent effect of reducing German grain imports from overseas under its certificate system.

Sweden is expected to import altogether from 7,000,000 to 9,000,000 bushels of wheat for the year ending June 30, 1926, and Norway will probably take from 5,000,000 to 6,000,000 bushels in the same period. Rye imports last season into Norway totalled 8,000,000 bushels, and into Sweden 5,000,000 bushels.

THE embargo on hay, straw and animals against Texas has been removed, effective April 15. California is now the only state embargoed.

PREVENTING DUST EXPLOSIONS IN STARCH FACTORIES

Regulations designed to prevent and control dust explosions in starch factories, tentatively adopted by the National Fire Protection Association and the National Board of Fire Underwriters a year ago, were presented with minor revisions for final adoption in Atlantic City, N. J., May 10, by D. J. Price, representative of the United States Department of Agriculture and chairman of the committee on dust explosion hazards. The regulations were adopted.

At previous conventions control measures for the prevention of dust explosions in grain elevators, flour and feed mills, pulverized fuel plants, and sugar and cocoa pulverizing plants, were adopted. These regulations are based to a large extent on the results of the study and investigation of dust explosions conducted by the Bureau of Chemistry, United States Department of Agriculture. They represent the commercial application by the various fire protection agencies of the results of this research in the laboratory and in the field.

Under the direction of Mr. Price, who is in charge of the dust explosion investigations, the Department is continuing its study of the problem in every phase. Studies are now being conducted with relation to the hazard in paper mills, wood working plants, sulphur manufacturing plants, and plants dealing with metals and many other forms of material, the handling of which creates an inflammable dust.

CITES LACK OF BARLEY CLEANERS

Lack of barley cleaning machines at most country elevators in certain sections of Minnesota was the cause of some commotion at the Federal barley grade hearing held in Minneapolis, Minn., April 30. The meeting was in charge of H. J. Besley, head of the grain division of the United States Department of Agriculture. Objection to the Federal dockage rules was entered by August Smith, one of Minnesota's farmer-legislators. He presented petitions signed by 400 Meeker County elevator men, farmers and bankers. The objectors emphasized that although country elevators are equipped to clean wheat, they are not prepared to handle barley cleaning business. They declared that the present method of marketing barley is satisfactory, selling it by sample. They raise barley mainly for feed and as a crop to rid land of foul weeds. For that reason the barley is sometimes half foreign seeds, all of which have some feeding value. When the farmer has a surplus of barley and sends it to Minneapolis the trade bids what it is worth to the buyer, but under a dockage rule the shipper would get nothing at all for the dockage, which would be separated, ground up as feed and sold back to the farmers.

FRENCH RYE TRADE BRISK

The order of the French ministry relative to the substitution of rye for wheat caused an abrupt upturn in Parisian rye quotations. When the announcement was made that, effective May 10, bread flours must be mixed with a minimum of 8 per cent rye flour, the price of rye advanced from 98 to 108 francs per 100 kilograms. This legislative measure was taken in order to assure France that her wheat supplies would last until the next harvest.

The official statement points out that although the wheat and flour supplies will about cover the requirements up to July 15, the use of some wheat substitute will assure a margin of safety. In cases where rye is not obtainable the use of rice, barley or corn as substitutes is recommended.

However, despite the French Government's precaution to assure a sufficient wheat supply, the kilogram of bread is selling for approximately two francs. Furthermore, the 1925 wheat harvest was the best for France since the war, but notwithstanding that fact, bread is not only dear, but also

of a very poor quality. The French Government is above all trying to avoid purchasing additional supplies from foreign countries, but on the other hand permits speculation in wheat at home. Holders of supplies sell to the consumers in small lots only, so as to maintain prices.

CROP REPORTING BOARD REPORTS

Efforts toward greater improvement of reports on major crops, including cotton, wheat, and corn, and expansion of work on livestock estimates, will be made this year by the United States Crop Reporting Board.

Changes to be made by the Board include the postponement of acreage estimates until July so as to minimize the necessity for later revisions; issuance of a wool production estimate on July 29, and issuance of indices of milk and egg production monthly beginning about August 10.

The Crop Board program has been developed on the basis of recommendations made by the Statistical Advisory Committee appointed by the Department of Agriculture in 1922 to study the work of the Board and to recommend improved practices. The Committee meets periodically at Washington, and is composed of Carroll W. Doten, Massachusetts Institute of Technology; Dr. G. F. Warren, Cornell University; Nat. C. Murray of Chicago, and W. I. King, National Bureau of Economic Research, New York.

The committee recommended that the semi-monthly cotton crop reports contain upper and lower quantitative forecasts, so as to indicate both the maximum and minimum crop that may be expected, in addition to the usual quantitative figures issued heretofore. Three quantitative figures would be included in each report, one figure being the estimate based on present practice, another figure indicating the possible yield should weather and boll weevil conditions prove equal to the best year in the last decade, and a third figure giving the possible yield should weather and boll weevil conditions prove to be as bad as in the worst year of the last decade.

The Crop Board is giving careful consideration to the advisability of issuing the quantitative forecasts as recommended by the committee. Should the Board decide to issue the forecasts in that manner, due public notice will be given by the Board. The statistical committee believed that the new method, if adopted, would more carefully safeguard the estimates from possible misinterpretation.

NEW K. C. RATES UNOPPOSED

Members of the Kansas City Board of Trade report that there has been no opposition apparent over the new commission basis established. The charge for buying or selling grain futures has been changed to \$10 per 5,000 bushels or multiples thereof, and to \$3 per 1,000 bushels or multiples thereof.

Charges for storage in regular elevators were increased to one cent per bushel for the first 10 days, or fraction, and one twenty-fifth of a cent per bushel a day for each subsequent day. Insurance charges were increased to 40 cents per 1,000 bushels per month, or fraction. The commission charges for handling cash grain were not changed, except that a minimum of \$10 a car was adopted.

THE GRAIN WORLD

The fact that Germany has sold considerable rye in western Europe does not indicate that the country is in the position of having a large exportable surplus, according to the Department of Commerce. The system of drawbacks, under which at a later date an amount of grain equaling the amount previously exported can be imported without the payment of duty, has permitted the German farmer to realize on his grain at a time when this was quite necessary. Taxes were to be paid, seed grain bought, and other fall expenses met,

whereas at the same time money was scarce and credit hard to obtain.

Before the war, agricultural credit needs in Germany were covered by long term mortgages and short term personal credit, used solely for operating capital. Today the impossibility of finding a market for long term agricultural loans has made it necessary to resort to personal credit, principally, notes, to finance agriculture. Government reports indicate that Prussian agriculture is paying approximately \$134,000,000 in interest annually on loans of \$1,405,000,000 as compared with \$85,752,000 interest on loans of \$2,143,800,000 before the war.

Samples were collected by the Sydney (New South Wales, Australia) Chamber of Commerce and government representatives of wheat of the current seasons. There were 180 samples, which when mixed, weighed half a ton, three-fifths being from the south and two-fifths from the west. From this grain, 13 Imperial bushels were measured and weighed. They weighed from 62 pounds 4 ounces to 62 pounds 13½ ounces, the average of the whole being 62 pounds 10½ ounces. After due allowance, the standard for the season was declared at 62¼ pounds. The sample, according to reports of the U. S. Department of Commerce, presented an excellent appearance, and had the wheat been clean it would have weighed even heavier, but the weight was kept down by a fairly heavy pressing of straw, chaff and oats. On two previous occasions only has the standard been higher, namely, in 1907-08 and 1918-19, and in each instance it was fixed at 62½ pounds.

It has been decided to encourage the growing of Alsike seed, at a recent meeting of one of the most active boards of agriculture in Canada, in Welland County, Ontario. It is the intention to put on a thorough campaign to increase the acreage and also to better the seed produced. Canadian Alsike seed is highly rated owing to its quality and hardness. The board is advocating the sowing of high quality seed and the elimination of all weeds before the crop is cut.

CUBA BUYS 55,000 POUNDS PREPARED FEED PER DAY

Cubans are buying an increasing quantity of feeds from the United States. For the month of January, exports of prepared feeds to the island amounted to 1,730,774 pounds or 55,831 per day. Besides these shipments, 144 tons of middlings, 182,035 pounds of screenings, and 481 tons of other millfeeds were also sent. The Cuban shipments of prepared feed formed approximately half of the total brand feed shipments for the first month this year—3,505,596 pounds. The total value was \$73,596. There were 33 other countries to which United States feeds were shipped in January, none of them taking near the volume going to Cuba.

CHANGES IN JAPANESE BEETLE QUARANTINE EFFECTIVE MAY 15

A revision of the Japanese beetle quarantine regulations by the Secretary of Agriculture includes minor changes which become effective May 15.

The only change which involves additional restrictions is a provision giving the Federal Department of Agriculture authority to require in the transporting of farm products, nursery and ornamental stock, sand, soil, earth, peat, compost, and manure, out of or through the regulated area, protection from possible beetle infestation. The protection must be in a manner approved by a United States inspector. To the definition of nursery and ornamental stock is added the phrase "or portions of plants for ornamental use." Other changes are mostly verbal.

With the additions made last December, the entire territory quarantined now includes six counties and parts of counties in southeastern Pennsylvania, 13 counties or parts of counties in southern New Jersey, and a part of New Castle County, Delaware. The revision of the regulations includes a description of the area now included under the quarantine.

THE GRAIN MARKET SITUATION

By G. A. COLLIER

Bureau of Agricultural Economics, U. S. Department of Agriculture

The grain market has been quite upset during the past month. Unsettled political conditions in several European countries, together with the strike which has recently developed in England, have created a very uncertain situation in respect to the European demand for wheat during the remainder of the crop year. Weather conditions have been generally favorable for the development of the Winter wheat crop both in the United States and Europe but the supply available for the world's needs during the next two months is materially smaller than at this time last year. The corn market has worked lower and future prices have reached a new low point for the crop year to date.

The average condition of the Winter wheat crop on May 1 for the United States was 84 per cent of normal compared with 77 per cent on May 1 last year. The area to be harvested is estimated at about 37,085,000 acres, or about 2,216,000 acres less than the acreage planted last fall and 5,816,000 acres more than the acreage harvested last year. The condition reported on May 1 is indicative of a yield per acre of approximately 14.8. This yield on the estimated area to be harvested would produce 548,908,000 bushels compared with a production last year of 398,486,000 bushels.

The condition of the crop is higher than the average in the Southwest, Kansas and in the West, including the Pacific Coast. The heaviest abandonment was in South Dakota, Montana and Colorado and was caused by the dry weather last winter and fall.

Information relative to the acreage of Winter wheat in European countries is not complete but for the countries for which reports have been received acreage has been slightly reduced from that of last year.

The seeding of Spring wheat was practically completed at the first of May but the weather has been too dry for proper germination. Local showers have occurred over parts of the belt during the past few days but at this writing (May 8) western Nebraska and southeastern South Dakota are still badly in need of moisture. Heavy wind storms have done some damage to the crop in places and the wheat that is up is uneven in many sections.

The conditions in the Spring wheat area of Canada are generally favorable and better than at this time last year, according to the *Manitoba Free Press*. This report indicates that from 75 to 100 per cent of the wheat has been seeded and 30 to 50 per cent of that seeded is up one to two inches and is fully 10 days ahead of last year. A statement of the acreage prepared in Canada for the 1926 crop shows a slight decrease over that of last year but the ultimate acreage will be determined by the amount of spring plowing that farmers are enabled to do.

The movement of wheat to market has held up well during the past few weeks considering the small stocks reported on March 1. The prospect of a large Winter wheat crop, however, has caused farmers to dispose of their remaining stocks of wheat. Demand has not been active as buyers generally have been taking only sufficient wheat for their immediate needs, but it has been larger than the current receipts and has resulted in a further reduction of commercial stocks, which are now reported at around 27,000,000 bushels compared with about 43,500,000 bushels at this time last year. Mill holdings at the last of March totaled nearly 65,000,000 bushels, which with the small demand for flour which has prevailed have been greater than the needs of some of the mills. Interior mills in the Hard Winter wheat belt have recently been offering some of their stocks upon the market to reduce their supply.

Cash prices have generally followed the trend of future prices but the premiums for high protein wheat have largely disappeared in the Hard Winter wheat markets and mills were paying more attention to test weight than to protein content. Har-

vesting of new wheat is expected to begin in Texas and Oklahoma in about 30 days and sales of considerable amounts of new wheat have been reported. Northwestern mills are reported to have bought Hard Winter wheat from the new crop. The unsettled situation in Europe has restricted the export demand but quotations on new crop wheat for shipment the last half of July are reported to be on the basis of about 12½ cents over the Chicago September price f. o. b. Galveston.

The Spring wheat markets have been rather dull with mills, the principal buyers of the current receipts. Premiums for high protein wheats have also been lowered in the Spring wheat markets and mills are expected to take deliveries on wheat offered on future contracts.

Prices of Soft Winter wheat have held relatively firmer than for the other classes because of the light supply. Mills have readily absorbed the current offerings at the principal markets. The markets in the Pacific Northwest have declined with the central western markets and old crop Soft and Western White wheats are quoted at this writing at \$1.43-\$1.44 per bushel at Portland, Ore. Weather conditions have been very favorable for the development of the wheat crop in this territory and prospects for a large crop are good. New crop wheat is being sold on the basis of \$1.31 per bushel for both Soft and Western White wheat delivered Portland or other terminal points.

The oats market has not changed greatly during the past month, although prices declined slightly recently in sympathy with the decline in other feed grains. Receipts have not been large and have been well taken by shippers and elevator interests. Stocks are being gradually reduced and at the first of May were about a 1,000,000 bushels smaller than May 1 last year. Oats seeding is practically completed but the germination of the spring oats has been rather uneven. Winter oats are heading in the South Atlantic States and harvesting is expected to begin in Texas and Oklahoma by the last of the month.

Prospects of ample supplies of corn during the last few months were largely responsible for the decline which occurred during the past week in corn future prices. The demand for cash grain has continued active, however, and prices for the current offerings of the better grades did not follow the full decline in the future prices.

The world supply of corn is larger than last year as a result of good yields on a record acreage in Argentina. According to the official estimate the Argentine corn production this year will reach about 279,000,000 bushels. This is an increase of 92,702,000 bushels over last year's small crop. Allowing for 80,000,000 bushels for home consumption and seed requirements about 200,000,000 bushels will be left for export and carryover into the next season. Last year's actual exports amounted to 142,000,000 bushels from a crop of 186,000,000 bushels. This large export, however, was apparently due to a large carryover from the good crop of the previous year. The yield per acre, according to the first estimate, is 26.3 bushels compared with 25.6 bushels, the average for the past 5 years.

Receipts of corn at the markets continues of moderate volume but stocks have not been materially increased recently and are not unusually large for this time of the year. Dry weather has improved the quality of the offerings and demand has been active for all the better grades. Western and southwestern markets have taken good amounts of corn and southern mills have been active buyers of White corn. White grades have been relatively higher than the Yellow and Mixed grades at the central western markets.

Weather has been favorable for field work and planting at this writing has extended as far north as north central Iowa and southern Nebraska. Progress has been slower east of the Mississippi River and but little corn has been planted north of the Ohio River. Warmer weather is needed quite generally for the crop from the Mississippi Valley eastward, while rains are needed in Iowa and Nebraska.

The rye market has worked lower with wheat

although the relatively poor condition of the new crop has tended to strengthen the market. The condition of the crop May 1 was officially estimated at 81.5 per cent of normal compared with 86.8 per cent on May 1 last year. The abandonment this year is considerably larger than last year and the acreage intended for grain is estimated at 3,565,000 acres, compared with 4,088,000 acres harvested in 1925.

There has been very little export demand for rye but the market receipts have been well taken by mills and shippers. Stocks in commercial channels are not large but are slightly larger than at this time last year, totaling about 13,750,000 bushels.

PEERLESS ELEVATOR ON NEW MONTANA RAILROAD

The railroads, according to some historians, are the agencies almost wholly responsible for the development of the Western States. Steel rails, though, cannot make a prosperous community. Only after railroad officials are convinced that there is enough personal enterprise in a grain area to warrant an investment of the railroad company's money, is the contract for building the new line made. Last fall the Great Northern Railroad's line was extended from Scobey west to Peerless, Mont., a distance of about 20 miles. Just as soon as building material could be transported over the new rails, construction on the Peerless grain storage plant was started. The president of the Peerless Farmers Grain Company is P. T. Karlsrud. Henry Jacobsen is vice-president, and Arnold Horgen, manager and secretary-treasurer.

Their enterprise fills a definite need of the community, and the business of the firm went immediately on to a paying basis. Wheat, flax, and other small grains are brought to the Peerless Elevator in a volume that is steadily increasing. The storage capacity for grain is 35,000 bushels in the 80-foot structure which rests on a 30 by 33-foot foundation. The house is binned in 14 compartments.

A gas engine, supplied by Fairbanks, Morse & Co., is used for power supply, and 400 feet of rope drive for power transmission. A Strong Scott Dump is installed along with two Fairbanks-Morse Scales, one of the hopper and one of the wagon type. Thus equipped, grain reception from the farmers and discharge into the Great Northern cars, is taken care of at a good rate of speed.

As yet, this company has no sideline activity, all the attention of Manager Horgen being centered on developing the grain trade at this point. The Peerless Elevator was completed January 20 of this year, and from the first it was hailed by the customers as a plant well named, as it is up-to-date in every respect. Many consider it the best house in northeastern Montana.

Some changes are now contemplated. A cleaner of adequate capacity is soon to be put to work and this will undoubtedly be a profitable investment, for the demand for it has already been considerable. Another new development will be the electrification of the plant. A highline is to be carried through Peerless, Mont., this summer. Current from the local transformer will then be available at a nominal charge.

AN independent investigation of the cost of wheat production in the profitable wheat growing districts in the Union of South Africa, has been made by the Division of Economics and Markets of the Department of Agriculture. The Department says of this in a recent bulletin:

It was found that the cost of production in the Cape Province, the principal wheat center, based on the returns for 1922 and 1923, was 18s. 2d. (about \$4.35) per 200-pound bag. The average for three seasons was slightly higher. For the Orange Free State the cost for three seasons averaged L1 4s. (\$5.82) per bag. In the Orange Free State crop failures, due to locusts, hail, drought, and blight, difficulties seldom encountered in the Cape, are fairly frequent. Wheat is the principal crop in the winter rainfall area and, while it supports a fairly large body of prosperous farmers, "the toll of years of unrelieved wheat growing is surely being exacted", and the crop is not as lucrative as formerly. An important factor contributing to the high cost of production is the low yield per acre which is almost the lowest in the world.

Decatur Entertains Illinois Grain Dealers

Annual Convention Affords Large Attendance at Crowded Two-Day Session Alternating Business and Pleasure

THANKS to the generosity of the Decatur grain men, both financial and in the contributing of their time and effort, the thirty-third annual convention of the Illinois Grain Dealers Association was splendidly entertained during the two-day program, May 11 and 12. All of the time not actually spent in the convention hall was disposed of advantageously and the membership had every reason to remember the Decatur meeting as an enjoyable one. Headquarters for the meetings was at the Orlando Hotel, and the registration was well in excess of 300 before noon of the first day.

President C. E. Graves, of Weston, called the meeting to order at 10:30 the first day, and, after the invocation by Rev. Fred W. Ingvolstead, there was an address of welcome by Mayor E. R. Elder, of Decatur. In offering the facilities of the city to the visiting grain dealers, the mayor paused for a few moments to say something of the leading industries of the city. He paid special tribute to the Staley Manufacturing Company, alluding to the company's civic spirit and relating several instances in which this spirit was demonstrated in a practical way.

President Graves replied briefly, and then proceeded with his address, saying:

PRESIDENT GRAVES' ADDRESS

In congratulating the grain trade at the convention in Peoria last May, on having escaped the pernicious legislation advocated by the professed friends, and would-be saviors of the agricultural class, your presi-



PRESIDENT C. E. GRAVES

dent felt rather optimistic as to the future, from the fact that prices for all farm products were bringing remunerative prices to the producer, which in turn would curtail the activities of the professional agitator and the bunk politician. However, the prevailing low prices for corn and oats, the former cereal being of very poor quality, thereby lessening the demand for commercial purposes, and the surplus of the latter grain, furnished the ammunition for the agitator and politician to wage the most intensive campaign for menacing legislation ever conducted in the history of our country.

As a result of this activity we find the agricultural committee in the lower house of Congress reporting out three bills, for the consideration of its members, without specifically recommending any one of the three, a situation unheard of in the annals of that legislative body. One, known as the Aswell-Curtis Bill, is satisfied that \$10,000,000 from the United States treasury will perform the miracle for farm relief; another, known as the Tinscher Bill, requires \$100,000,000 of Uncle Sam's treasury notes to experiment with, and last but not least, the bill filed by Congressman Haugen and Dickinson and whose damn is the "Committee of Twenty-two" (and which will be damned by the real farmer later on if it becomes a law), is contented but not satisfied with the insignificant sum of \$375,000,000 of the taxpayers' money to play with. The latter bill is sponsored

by the American Farm Bureau Federation, as it will in all probability furnish more jobs and take care of more of the professed patriots for agricultural relief, and whose advocates say it must be this or nothing.

The Tinscher Bill is being "fathered" by Secretary Jardine, and appears to have the backing of the administration, but we doubt if the chief executive of our nation has any real faith in any of this proposed legislation for farm relief, as he knows it will conflict with his well known and sensible plan for tax reduction. The statement in his Chicago address last fall "that some will go broke on a mountain of gold while others will grow rich on a stone pile," explains the entire situation in a nut-shell.

Perhaps the most sensible plan for farm relief, known as the McKinley-Adkins Bill, sponsored by two of the best friends the farmer has in Congress, is not even being considered. The features of this bill will be ably presented by Professor Charles Stewart, chief of agricultural economics, University of Illinois, to your association this afternoon. It was with some hesitation that your presiding officer presumed to discuss farm relief legislation, in his annual address, from the fact that if your best judgment caused you to have an opinion that did not coincide with the radical, you are branded at once as an enemy of the farmer and farm organizations.

The independent grain dealer and his organization welcomes any constructive legislation for the good of the grain trade, and the farmer in general, but will stand four-square in opposition to any legislation that confers special favors to some one in his line of business, but denies him the same privileges under the law. The time has come when men who have the courage of their convictions must stand for them in a most emphatic manner and oppose the demagogue who is only an office seeker, or a professional fee artist.

The brief entitled "The Grain Trade," prepared by the Legislative Committee of the Grain Dealers National Association, did more to awaken sentiment and cause the defeat of the McNary-Haugen Bill than all other things combined. The same committee also compiled the publication, "Co-operation in the United States," and if every farm publication would have published its contents, or each farm organization presented every member with a copy, the three-ring circus would not be performing in the legislative halls of Congress at the present time.

The plea is being made that special legislation was enacted for the railroads, manufacturers and labor, then why not for agriculture? Some of this was war-time legislation and should be repealed instead of enacting further legislation that would only add fuel to the flame and defeat the purpose of its enactment.

The present high freight rates on grain are the cause of much dissatisfaction to both shipper and producer. At the same time the increased cost of operating the railroads, due to higher priced material, better pay to employees, building hard roads parallel with some of the short lines, and as a natural result reducing the income of both the passenger and freight departments, raises the question as to whether rates can be reduced without curtailing the efficiency of the railroads. The railroads are essential to the grain trade, and have had more to do with the commercial development of our country than any other one thing. The regional advisory boards, composed of shippers of all commodities, which have operated so efficiently the past two years in conjunction with the American Railway Association, have promoted a get-together spirit between shipper and carrier, resulting in much benefit to both. Let us hope that the best minds on both sides of the rate controversy may bring about a happy solution of this important question at the earliest date possible.

The independent grain dealer has no quarrel with the farmer or farm organizations, in fact many grain men are also farmers and members of farm organizations. His interest is in the prosperity of the farmer, and on many occasions that interest has been manifested in timely financial aid during depression and low prices, also good advice in selling at remunerative prices to the producer. However, any legislation that will enable any particular class of people, farmer or otherwise, to extract money from the Federal, state or county treasury to fight some one in the same line of business, and who is conducting it in a lawful and legitimate manner, is not conducive to good government, and furthermore is a violation in both spirit and letter of the principle embodied in the Constitution of the United States of America. The opinion of your humble servant is that what our country is most in need of at the present time is a thorough study of the preamble to our national constitution and a closer application of the Golden Rule to our fellow-men. Then, indeed, will the millennium have arrived in the grain trade.

This was followed by the annual reports of the secretary, W. E. Culbertson of Delavan, and treasurer, M. J. Porterfield of Murdock. The secretary submitted the following outline of the association's activities during the last year. He commented on

legislative problems, scale inspection, insurance, arbitration and other subjects.

SECRETARY'S ANNUAL REPORT

Your secretary in presenting his eighth annual report will endeavor to be as brief as possible, yet give you an account of his stewardship the past year.

In matters pertaining to national legislation we have opposed the adoption of the metric system for the United States standard of weights and measures, not because there is no merit to this system but for the reason that our present laws permit its use and we believe it a mistake to attempt to force the people to use something they do not want; besides, it would bring much expense and confusion to the grain trade.

With no thought of protesting against the enactment of legislation, co-operative or otherwise, which would aid American agriculture, we have been compelled to file objections against practically every measure so far introduced, because of discrimination against the independent grain dealer. Some of the measures go so far as to virtually drive the independent dealer out of the grain business. Your Association is anxious that the farmer be given relief, but it does not believe that destroying the existing marketing machinery will accomplish the desired results. Prosperity for the producer



SECRETARY W. E. CULBERTSON

will not come from new methods of marketing unless they are founded upon sane business practices worked out by years of experience in the trade.

The scale department has continued to increase in efficiency, and the past year our inspectors have tested and repaired more grain scales than any year since the service was inaugurated. There is no scale in use by the grain trade that our inspectors cannot repair, and they are always willing to help any dealer when in trouble, whether a member or not, but naturally, it is our rule to give preference to the member, when both member and non-member are in trouble at the same time, but with two fully-equipped trucks on the road during the entire season it is very seldom that any dealer is compelled to be long without the use of his scale. The motto of this department is "Service," and any inspector who fails to live up to this cannot expect to remain in our employ. We have but lately mailed notice to the entire trade that our inspectors were arranging their trips for the season, and if you have not sent in your request for inspection, it should be attended to at an early date. The charges made on the regular trips are less than where the inspector has to make a special one.

The insurance department which has been maintained for the past two years netted the Association nearly \$500 last year. This department is prepared to handle every class of insurance other than life and fire, the policies being written by the Integrity Mutual Casualty Company of Chicago. The cost of placing your insurance through your Association is no more than in any other first class company, and is probably less, for the Integrity has always allowed some dividends. The commissions earned by your Association, though small, prove most welcome, and it is hoped that more of our members may patronize this department upon the expiration of their present policies.

In matters pertaining to arbitration, there has been nothing of dispute between our members which made necessary calling a meeting of the arbitration committee. However, there has been a number of misunderstandings adjusted by your secretary. This is the fourth consecutive year that we have had no cases referred to our committee, and is something for every member to be proud of.

The 1926 Directory of the Grain Trade of Illinois was compiled and issued to the trade January 1. Special effort was made to make this directory the most complete and accurate of any ever issued, and your secre-

tary desires to take this means of thanking those who gave us their assistance, and especially the advertisers, for without the advertisers it would be impossible for our organization to get out a directory of the character we do. The cost of printing amounts to more than \$800, and to mail a copy to each of the elevators and mills in Illinois requires nearly \$200 in postage. The labor is done by our regular office force and as a rule the Association is able to show some financial benefits from the directory. The profits this year were indeed most welcome.

In addition to attending to the regular correspondence of the office, your secretary has spent as much time as possible in visiting the members and attending local meetings. During the past year very few new members were added to the Association, and as a result, our membership shows a loss. Through business failures we have lost 16 members, and 14 through resignation, a total of 30 members.

In conclusion, your secretary wishes to take this opportunity of thanking the officers, directors and members of this organization who have so willingly cooperated with him in every way, and assisted him at all times.

As to the financial condition of the Association, our books show: Balance on hand May 1, 1925, of \$1,836.24; receipts, \$7,541.58; disbursements, \$7,567.44; leaving a balance on hand May 1, 1926, of \$1,810.38.

Chairman E. M. Wayne of the Executive Committee reported that the committee had had but little for its attention in the past year.

At the conclusion of the first morning's session the chair appointed the committees. The Nominating Committee included: E. M. Wayne, chairman, L. B. Walton, and V. L. Horton. The Resolutions Committee included: H. A. Hillmer, chairman, H. I. Baldwin, J. E. Brennan, W. A. Webb, and E. Hammon.

TUESDAY AFTERNOON

President Graves opened the afternoon session by announcing that it would be impossible for Fred G. Horner, president of the Grain Dealers National Association, to address the meeting as he had been detained in Washington, D. C., on the national association's business. It had also been hoped that Secretary Charles Quinn of the national organization could be present but the same reason applied in the case of his absence.

DR. STEWART'S ADDRESS

The first speaker of the afternoon session was Professor Charles L. Stewart, chief of agricultural economics, University of Illinois, who spoke on "Farm Relief and the Grain Trade."

As long as the Federal treasury goes without



DR. CHARLES L. STEWART

a quarter to a half billion dollars of import revenue each year because of keeping tariff duties highly protective for American industry, this country is justified in allowing tariff rebates or even in paying out cash to at least half these sums in favor of

American agriculture, said Dr. Stewart.

Grain dealers occupy a position which should enable them to work both with agriculture and with industry in shaping national legislation designed to bring protection prices to agricultural products of which our country has exportable surpluses. It should not be difficult, he said, for grain dealers to help industrial leaders to see the importance of a prosperous American agriculture from the standpoint of American industry. On the other hand,

be dealt with freely under the Haugen bill, be restricted to only two years.

Second, in administering awards designed to raise prices of products by the amounts of import duties, special effort should be made to raise the prices of finished products in equal proportion to the advances in the prices effected on raw materials. If the price of wheat is advanced by 42 cents a bushel it would seem that the price of flour should be advanced \$1.89 a barrel, or 85 cents more



PRESIDENT-ELECT A. C. KOCH

grain dealers should work with agricultural leaders in amending measures now before Congress or otherwise in promoting legislation that will bring American prices for farm products without sacrifice to our millers or other processors and dealers in the raw and finished products of our agriculture.

A constructive attitude on the part of the grain dealers could do more now than at any time in over a quarter of a century to help remove the influences which tend to stunt our grain trade and which threaten to plunge our consumers into a position of dependence on other countries for food supply.

While the consideration of too far-reaching amendments to measures now before Congress might obstruct the major interest of farmers and grain dealers, nevertheless it is not too late to improve pending bills to the mutual advantage of the two groups. Three such amendments are worthy of consideration.

First, in making Government awards designed to Americanize prices of farm products, unnecessary restrictions of the board's liberty in awarding contracts or in making other awards may lead to serious legal difficulties and are, therefore, inadvisable.

When export bounties were paid on grain by the national taxpayers of England and when export premiums in the form of tariff rebates were developed on grain in Germany and more recently in Sweden, it was not required that awards be granted to one form of export agency in preference to another. A Government agency should be permitted to make awards so as best to conserve the funds it administers and so as to obtain the most efficient accomplishment of the ends for which the awards are let. Otherwise, the Government may be placed in the position of having awarded subsidies or rebates to a particular co-operative association or a particular non-co-operative agency rendering service less efficient than that which a competitor might have given. It is not necessary that the period during which non-co-operative agencies can

per barrel than the present import duty on flour. So long as the present import duty on flour is left at \$1.04 per barrel, it would seem desirable that the advance effected in the case of a bushel of wheat should be in the neighborhood of 23 cents. Provision could probably be made in any bill put forward for passage whereby rates on raw materials might be applied on a proportional basis until such time as higher import duties are effected in the case of the finished product.

The substitution of tariff rebates for direct cash subsidies from the treasury would be a third desirable development. This would make it possible to avoid difficulties of a constitutional order almost sure to arise if treasury expenditures are made in the form of cash subsidies.

Even if tariff rebates were caused to affect treasury receipts by as large amounts as subsidies would affect treasury expenditures their ability to stand the court test recommends them ahead of cash subsidies. One point in favor of tariff rebates, or export debentures as they are called in S. 2289 and H. R. 7392, is that rates per bushel or barrel for export action may be set at different figures from those which appear for the same products in the import tariff schedules. This would make it a simple matter to keep export rates on raw products in line with those on products of agricultural milling and other processes.

At the conclusion of the address, it was proposed that the plan proposed by Professor Stewart be endorsed; but inasmuch as the time for debate would be limited at this time, the proposal was referred to the Resolutions Committee, to be reported back at the next morning's session.

The meeting then adjourned till morning, and the members spent the remainder of the afternoon in either making a trip through the Staley Manufacturing Company's plant or taking a boat ride on Lake Decatur. Motor busses were provided which gave those present a rapid means of getting either to the lake or the plant, as they preferred.

TUESDAY EVENING

The evening of the first day was spent at the Elks' Club on Lake Decatur. The groups which had visited the Staley factory in the afternoon were transported in motor busses to the club house, and the others who had taken the boat trip were landed at the club's dock. Extensive arrangements had been made for entertainment, and the ladies were invited. A large dinner was served to over 400 grain dealers and their wives and friends at the Elks' Club, the occasion being enlivened by excellent music and various numbers on the program. Following this there was a dance.

WEDNESDAY MORNING

The second day's proceedings were opened with an address by Charles S. Clark of Chicago, who spoke on "Free Storage or Larceny by Embezzlement." Among other facts, he pointed out that there were 2,251 elevators at country stations in Illinois in 1912, and there are now 2,051. There are 1,507 stations operated in the state, 1,040 of which have one elevator only, 404 have two, 52 have three, 10 have four, and one has five.

Following this address, the meeting was open for general discussion of various subjects, and Mr. Butler was called upon to talk on sidelines handled by country elevators.

Mr. Butler said that he had recently undertaken a survey, for insurance purposes, based on the audits of about 80 country elevators distributed over a large area. Some of the houses considered handled sidelines and some did not, and an analysis was made comparing the profits on grain and the profits on sidelines. "The margin of profit in the grain business alone," said Mr. Butler, "was 4.51 per cent; and the margin of profit in sidelines was 12 per cent. Operating costs ran to about 3 per cent, showing a net margin in the handling of grain of 1.52 per cent; and a net margin in the handling of sidelines of 9.5 per cent."

He went on to say that the daily expenses in some cases ran as low as 67 cents, and that on an investment of about \$16,000 ran in certain cases around \$14.50 per day. The average of the whole number considered, as to net profit per annum was \$3,000.

He also pointed out that in the matter of shortages oats and wheat showed better than 2 per cent in these analyses, based on 1924 figures, while the average for corn was .18 per cent. Only certain ones of the 80 elevators were included in this compilation. Mr. Butler said that he felt it necessary to question the accuracy of the figures on which this is based as the difference seemed too great to be logical.

The subject of the metric system on the bill now pending before Congress to compel its use was introduced, and it was pointed out that the adoption of this legislation would lead to large expense to country elevators, in that equipment would have to be replaced. It would mean the scrapping of existing weights and replacing of scale beams.

President Graves called on J. A. Schmitz, weighmaster of the Chicago Board of Trade, and asked his views on the subject. Mr. Schmitz said that while the mechanical difficulties in changing to the metric system would be considerable and the cost involved would naturally be an important item, he considered that the necessary mental adjustment would be of still greater import. He said it would not only involve the matter of the elevator operators getting used to thinking in the new measure instead of bushels, but would also involve getting the farmers used to it. He said he could easily see that this might become a much more serious problem than might appear at first glance.

In concluding his remarks, Mr. Schmitz called attention to that portion of Secretary Culbertson's report which referred to extensive use of the Illinois Grain Dealers Association's scale department. He stressed the importance of having accurate scales and pointed out that by making the use of the Association's facilities more general it would be possible to keep the cost of the work down to a minimum. He reviewed briefly what was being done in a similar way at the terminal market in

Chicago, pointing out that three scale men were kept busy there throughout the year.

DISTRICT MEETINGS—MEMBERSHIP

The president introduced the subject of holding district meetings of grain dealers throughout the state during the year, and asked for expressions from those present. Mr. Butler recited briefly what had been accomplished in this way by the Ohio Association, saying that at some of the district meetings which they had held there had been an attendance of 100 or more grain men. He also explained that the plan had been a great assistance in recruiting new members.

Secretary Culbertson then spoke briefly in regard to the International Harvester Company's exchange offer of corn for implements. The question was asked from the floor as to what plan the company intended to use for handling the corn, and what part, if any, the elevator men would have in handling the situation. Mr. Culbertson replied that he was informed by the harvester company's general agent that the plans for marketing the corn had not yet been perfected.

The Resolutions Committee was then called upon to report, and the following resolutions, offered by Chairman Hillmer, were unanimously adopted by the convention.

RESOLUTIONS

A resolution was adopted in memory of the late Victor Dewein of the Association, who died during the past year.

A resolution was adopted opposed to the dockage feature in the proposed new grades in the projected United States Government standards for barley.

A resolution was passed advocating acceptance of Professor Stewart's invitation to attend the coming short course in elevator management, to be held in June, at the University of Illinois.

A resolution was adopted indicating that whereas an acute price depression exists in the agricultural world, the Illinois Grain Dealers Association would be pleased to co-operate in securing legislation which would tend toward improved conditions, utilizing the present marketing system; and the resolution particularly commended the export debenture plan, as included in the McKinley-Adkins' Bill in Congress. Telegrams were to be sent to President Horner and Secretary Quinn of the Grain Dealers National Association covering this resolution.

A resolution of thanks was recorded, to Professor Stewart and C. S. Clark for their addresses; to the grain dealers of Decatur for the welcome extended and the generous entertainment; to the convention hotel; to the insurance companies who assisted in registration; and to the retiring officers for their services to the Association during the year.

REPORT OF NOMINATING COMMITTEE

Following the adoption of the resolutions, Chairman E. M. Wayne of the Nominating Committee moved that the secretary be requested to cast the unanimous ballot of the membership for the following officers for the new term: President, A. C. Koch, Breese; first vice-president, L. A. Tripp, Assumption; second vice-president, H. R. Meents, Clifton; and the following directors: H. M. Dewey, Camp Grove; Fred G. Horner, Lawrenceville; Thomas Ogden, Champaign; L. W. Railsbach, Weldon; and F. S. Ware, Butler.

The officers and directors named having been unanimously elected, President Graves introduced the President-Elect, A. C. Koch, who was duly installed and made a brief address. He called attention to the necessity for concerted action, and said that the cure for the present agricultural difficulty does not lie in legislation but the farm leaders fear to tell the farmers so. He promised a continuation of the constructive policies of the Illinois Grain Dealers Association and assured the members that he stood ready to serve the grain men of Illinois in his term of office to the best of his ability.

After the applause had subsided, he called for any new business which might require attention before adjournment. Mr. Booth spoke of the advisability of a membership campaign, and said that

the enthusiastic welcome extended to the convention extended by the Decatur men had inspired him to ask for renewed efforts in strengthening the organization. A brief discussion followed, in which it was suggested that the ever-ready chairman of the Executive Committee, E. M. Wayne, be designated "a flying squadron of one" to travel the state on a membership drive.

On motion by Mr. Wayne, the meeting adjourned *sine die*.

NEW PHILADELPHIA ELEVATOR

Replacing the structure which was destroyed by fire two years ago, the Reading Company last month officially opened at Twentieth and Hamilton Streets, in the heart of Philadelphia, its new modern concrete elevator. It is understood to have cost in the neighborhood of \$325,000 and has a capacity of 250,000 bushels. The new grain elevator is located on the tracks of the Reading Company and is equipped for the efficient handling of domestic grain, in addition to which a storage in transit privilege permits the reshipment of western



READING ELEVATOR AT PHILADELPHIA, PA.

grain for export through the company's Port Richmond Elevators at Philadelphia.

The elevator is electrically operated and is especially designed for the quick handling of grain both from cars and to teams or motor trucks. There are three grain legs having a combined capacity of 10,000 to 12,000 bushels per hour, all of which can be operated at the same time. Ample storage bins have been provided for special or individual use to enable merchants to retain the identity of their grain if required. Equipment includes the most modern cleaning and screening machinery to take care of all kinds of grain, as well as the latest type of hopper, modern signal system, ticket elevator, speaking tubes, telephones, etc. The building is also fitted with a venting system, so designed as to reduce explosive risks to a minimum. Two concrete driveways leading from 19th Street to 20th Street serve the elevator and two 20-ton Fairbanks Scales are conveniently located for the purpose of weighing empty and loaded teams or trucks. The new elevator will be operated by the Philadelphia Grain Elevator Company, a subsidiary of the Reading Company, of which O. H. Hagerman is the manager.

In addition to this structure, the Reading Company is also building a new export elevator at Port Richmond which will have a capacity of 2,500,000 bushels. Work on this elevator is being pressed and when completed it will give the Port of Philadelphia facilities for handling 7,500,000 bushels.

NEWS LETTERS

KANSAS CITY

B. S. BROWN - CORRESPONDENT

THE case of the Kansas City Board of Trade against North T. Gentry, attorney general of Missouri, attacking the legality of the Missouri tax on trades in grain futures, is now pending, having been taken under advisement by Federal judges Van Valkenburg, Reeves and Otis. The petition was filed by the Board on February 12 this year, and on February 16 Judge Reeves granted a temporary restraining order, providing that the taxes be impounded until such time as the case is decided. The suit grows out of an act by the Missouri legislature passed in 1907 which states that a tax of 25 cents must be paid on every trade in which grain is bought for future delivery. The Board of Trade contends that this act was superseded by the Capper-Tincher Act, passed by Congress September 21, 1922, declaring all trades in grain futures to be interstate commerce, and is therefore null and void. Since the suit involves the constitutionality of a state law, it must be heard by three United States judges. A substantial amount of money is involved in the case, which seeks only to enjoin the attorney general from collecting any such taxes in the future. There is no question of refund on past taxes, except in the case of the taxes which have been collected since the action by the Board was started. These have been impounded, by order of the court, and in case the law is thrown out by the decision of the judges, this amount, a considerable sum, will be returned to the traders from whom it was collected. The Kansas City Board was represented in the recent hearing by E. R. Morrison, James E. Nugent, Homer H. Berger, H. H. Hassler and C. C. Byers, Jr. The hearing was also attended by Henry Davis, attorney for the St. Louis Merchants Exchange, and Morris Townley, attorney for the Chicago Board of Trade. A decision in the case is expected in a short time.

Two memberships on the Kansas City Board of Trade have changed hands recently, both going to the same company. The memberships, which formerly belonged to B. M. Huffine, of the Huffine Grain Company, and to T. B. Armstrong, were purchased by the Continental Grain Company of Chicago, for a consideration of \$10,000 and \$11,500 respectively. The Continental Grain Company will be represented on the Kansas City Board of Trade by S. S. Carlisle, who will manage the office of the company here, and S. Mayer, of Chicago, vice-president of the company, who, however, will retain his residence in Chicago. Mr. Carlisle was formerly connected with the W. J. Edwards Grain Company of St. Louis, coming from there to take charge of the Kansas City office of the Continental. It has not been decided under what name the company will operate here, a change in the name being necessary because there is a company already operating on the Kansas City Board of Trade under the name of the Continental Grain Company.

Stuart Carkener, father of George S. Carkener, vice-president of the firm of Goffe & Carkener, grain dealers of this city, died here recently. Mr. Carkener was a prominent lawyer until his retirement from active life in 1920, a Civil war veteran and a pioneer of Kansas City, coming here 40 years ago. A graduate of the University of Michigan, Mr. Carkener was, at the time of his death at the age of 88, probably the oldest alumnus of that university.

Lucius M. Couch, mill feed jobber, with offices in the Postal Building, died here at his home recently. Death was caused by influenza and a consequent weakness of the heart. Mr. Couch was 65 years of age and had been in the feed business in this city for 20 years. Mr. Couch came to Kansas City in 1895 from Greensboro, N. C. His father was John Quincy Adams Couch, a descendant of the sixth president of the United States. His widow, Mrs. Laura Couch, is the daughter of Martha Hayes, who was a cousin of ex-Presidentutherford B. Hayes. Besides his widow he leaves a daughter, Mrs. Mattie C. Peltzer, of Los Angeles.

The Trans-Missouri-Kansas Shippers' Advisory Board met here April 28 in the office of Clyde M. Reed, chairman of the Board, for the purpose of making plans to organize a joint terminal grain committee, composed of representatives of the elevators, mills, commission

firms and Boards of Trade, together with the respective representatives of the principal grain carrying railroads of this section. The purpose of the committee is to speed up service on cars at terminal points. The duties of the committee, as outlined, would consist of gathering information from the railroads covering Kansas City and the principal interior hold and reconsignment points, such as Wichita, Hutchinson, Salina and possibly Topeka. It was suggested that the committee establish headquarters at Kansas City, and be assisted by like committees to be established at Wichita, Hutchinson and Salina.

A comprehensive plan, designed to make Kansas an even greater wheat state, was outlined at a recent conference of representatives of wheat growers' associations, railroad and grain exchange officials, and authorities from the Kansas State Agricultural College, held in this city at the call of Dr. F. D. Farrel, president of the college. The conference was attended by approximately 40 representatives of all interests in the state connected with the wheat industry. The plan calls for a five-year program looking toward improvements in quality, greater increase in yield, lower costs of production, better crop rotation, more effective marketing, and larger profits for the farmer. The program was worked out by the deans and the president of the Kansas State Agricultural College as a part of the extension division work of the college, and states in the introduction that united effort will accomplish more than individual effort in extension work. The ultimate goal at the end of five years is as follows: 1—Hessian Fly controlled 100 per cent. 2—Smut of wheat and sorghum controlled 80 per cent. 3—Market reports followed by 20 per cent of the farmers. 4—Wheat sold on protein and grade basis by 80 per cent of farmers. 5—Standard varieties planted by 80 per cent of the farmers. 6—Crop rotation practiced on 5 per cent of farms.

Harry Williams, head of the H. R. Williams Mill Supply Company, died here at his home after a long illness. Mr. Williams was 59 years old and had been in business for 21 years. He was well known to millers all over the country. He is survived by the widow, and one daughter, Mrs. Ruth Richards.

According to an article which appeared in the *Kansas Cityan*, the official organ of the Kansas City Chamber of Commerce, in the recent issue which was sent to the prominent business men in the towns which were visited on the annual trade trip of the Chamber, Kansas City is steadily increasing its standing as one of the large grain markets of the country. The article states that Kansas City, the third largest general grain market in the country and the largest primary wheat market in the world, has made substantial increases in its elevator capacity during the past year. Modern handling facilities installed in these elevators have also made it possible to handle a great deal more grain and is quite as important as the construction of additional storage space. Kansas City's 41 public and private elevators have a total capacity of 36,172,500 bushels. The article continues by saying that as a flour milling center Kansas City ranks third. Kansas City flour mills have a total capacity of 25,350 barrels per day.

CINCINNATI

HARRY A. KENNY - CORRESPONDENT

ALTHOUGH receipts of grain and feed the past month showed an increase over the previous month, the volume of business transacted by dealers was not up to their expectations and the prices were not satisfactory. Most of the buying was on a hand-to-mouth basis and buyers in many instances held off purchasing until they were assured that they were buying at rock bottom levels, while the grain and feed business insofar as receipts were concerned showed an increase, hay fell off. Dealers contended that this market still is feeling the effects of the short 1925 crop. Grain receipts for the month increased 304 cars over the previous period, feed 28 cars, while hay decreased 261 cars.

The Cincinnati Grain & Hay Exchange is now issuing a daily market report for the benefit of its members and shippers to this market. It is known as the Daily

Market Report and is edited by George Mosbacher, with D. J. Schuh, executive secretary of the Exchange as business manager. For years the daily report detailing the movements of the grain and hay markets, both local and national was published by a concern which recently Mr. Mosbacher aspired to the head. The Exchange felt that it could serve its members and the shippers to this market better by taking over the publication and this was accomplished at a recent meeting of the Board of Directors.

Condolences of the trade were extended to Lewis W. Perkins, manager of the traffic department of the Cincinnati Grain & Hay Exchange last month, who suffered the loss of his wife on April 23.

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

THE grain trade of Milwaukee is still running very slack judging from the report of receipts for April. Even oats and barley, heretofore counted on to help the grain total along a little and offset some of the losses, have shown drastic declines in receipts. Milwaukee grain men declare that they are now convinced that grain supplies are going to be light for the rest of this crop year. The tendency has prevailed so long that they feel sure it will continue to the end of the crop season. The hopeful attitude however, is manifest for crops of the new year, the prospects being exceptionally bright in most of Milwaukee's grain territory, barring any continuation of the spell of dry weather.

Construction of the Elevator "E" of the Chicago, Milwaukee & St. Paul Railroad is being rushed with all possible speed in the month of May. The plans call for an increase in storage capacity of no less than 660,000 bushels. The structure has already been leased to the Armour grain interests. The new workinghouse will have a capacity of 210,000 bushels and the concrete bins to be added will hold about 450,000 bushels, so that the total storage capacity of the elevator will be 1,310,000 bushels, there being at present 650,000 bushels capacity in the bins which were not razed by the fire. The Burrell Engineering & Construction Company of Chicago are the builders. Albert R. Taylor of the Armour Grain Company will be in active charge of the elevator. "The completion of this elevator by grain shipping time next fall will have a fine effect in stimulating the grain trade of this city," declared Harry A. Plumb, secretary of the Milwaukee Chamber of Commerce. He contends that this new structure will be the biggest factor next season in Milwaukee's grain trade. Other grain men are equally optimistic over the bright prospects for the new season, because of the added conveniences which will be available at the Milwaukee market.

The total grain in store in Milwaukee has been cut down to a considerable extent due to the beginning of navigation on the Great Lakes. The reports at the beginning of the month indicated holdings of approximately 183,000 bushels of wheat, 1,217,000 bushels of corn, 794,000 bushels of oats, 129,000 bushels of barley and 310,000 bushels of rye. Within a few weeks these grain supplies will be drawn down to a mere nominal point as shipments on the Great Lakes take care of all the last month's accumulations.

The May rate of interest on advances at the Chamber of Commerce has been fixed by the Finance Committee at 6 per cent. This is the rate which has prevailed for many months.

Milwaukee grain men are again on a daylight savings basis, in line with the Chicago Board of Trade. The rest of Milwaukee has no daylight saving but the grain men alone are able to keep up this desirable practice and to keep the Exchange on a par with Chicago.

Great Lakes shipping men report that the situation at Milwaukee is deplorable because so many boats are compelled to go out light because of lack of cargoes. Lake shipping men assert that the present situation is proof that tonnage is needed here rather than stimulation of the building of additional shipping facilities. Opening of the straits has sent into Milwaukee quite a number of coal ships but most of these vessels have had to go out empty. The W. D. Rees took on grain at the

Rialto Elevator and the W. E. Fitzgerald at the Kinnickinnic Elevator and several additional coal boats will also load up with grain shortly.

One of the old time millers of Milwaukee who has been identified with the trade for many years, Carl Aken, is dead at the age of 67. Mr. Aken organized the Aken Flour Milling Company many years ago and he was president of the company at the time of his death. Born in Germany, Mr. Aken emigrated to the United States at an early age. He was a member of the Von Steuben society and he was also prominent in Wisconsin Masonic circles, holding the Thirty Third degree in this order. He is survived by a widow, two daughters, and one son.

The developing of the grain business is proceeding at a good pace at Superior where 15 new concrete grain storage tanks with 600,000 bushels of capacity will be built this summer. The Itasca Elevator Company will be the builders and they are planning to spend \$600,000 on the project. This will move the elevator capacity of Superior well up to the 20,000,000 bushel mark. Before this plan was announced, the elevator capacity of the city was a little more than 19,000,000 bushels.

James R. Stewart of Minneapolis has been elected to membership in the Milwaukee Chamber of Commerce.

Walter J. Fitzgerald, the leading vessel agent of Milwaukee, reports that this city will be a mecca for many steamers from foreign countries this year. He already has notice of several steamers coming from England and from Sweden. The first of these boats should arrive around May 20, he asserts. After unloading these ships Mr. Fitzgerald says he will hunt for traffic on the Great Lakes and many of them are likely to carry back grain to the leading Canadian ports.

One of the oldest members of the Chamber of Commerce, one who had been identified with the Exchange since 1876, James Hannan, is dead at the age of 83 years. This made Mr. Hannan a member of the local exchange for no less than 50 years.

Mr. Hannan had lived in Milwaukee for about 70 years and had been a familiar figure in the business, civic and political life of the city and state for many years. Born in Ireland in County Limerick, he came to this country in 1853. Though he was only 18 years old in 1860, he got into the Civil War promptly.

Early in his career Mr. Hannan became actively identified with the Republican Party. He was made deputy collector of customs in the Harrison administration. Mr. Hannan had 11 children of whom 10 still survive. His wife also survives.

The following committees have been named for the Board of Directors of the Chamber of Commerce for the coming year: Finance: L. R. Fyfe, A. L. Flanagan and P. P. Donahue. Furniture and rooms: O. R. Sickert, L. J. Keefe and Harry A. Plumb. Grain to arrive: L. J. Keefe, P. P. Donahue and Linus J. Beck. Market reports: Linus J. Beck, J. V. Lauer and George D. Weschler. Committee on membership: G. W. Kruse, E. La Budde and J. V. Lauer. Rules and regulations: A. L. Johnstone, O. R. Sickert and L. R. Fyfe. Supplies: Harry A. Plumb, George B. Weschler and J. V. Lauer. Transportation: E. La Budde, A. L. Flanagan and G. W. Kruse.

The committees of the Chamber of Commerce as a whole are as follows:

Supervisors of Grain Inspection and Weighing: J. H. Manning, E. H. Heimke, E. C. Christi, A. J. Tiebs and Josef Mueller. Supervisors of flour inspection: J. H. Crittenden, W. H. Manegold, J. H. Manning, Phillip Orth and F. Leu. Arbitration of dried peas and beans: Charles F. Coughlin, W. R. Madden, W. F. Lodde, William Haberman and D. V. Hales. Arbitration of grass and Clover seed: J. J. Crandall, F. W. Kellogg, H. V. Courteen, Hugo Teweles and R. I. Campbell. Cash grain closing: James T. Mallon, A. L. Jacobs, M. H. Kleser, with alternates, A. E. Lauer, James Lawrie and W. R. Madden. Membership: W. C. Holstein, William Eiteneier, J. W. Rice, F. J. Phelan and James Lawrie. Publicity: C. A. Houlton, E. J. Koppelkam, J. J. Murphy, John C. Hensley and Secretary H. A. Plumb. Weather Reports: E. G. Hadden, Josef Mueller and T. M. Corcoran.

Milwaukee grain men are watching with the keenest interest the radical developments which are now taking place in connection with the new harbor building. The most important step in this process is the appointment of C. U. Smith as the Milwaukee terminal engineer. The Milwaukee Harbor Commission has given Mr. Smith latitude to go ahead and develop the port terminal in his own way. Mr. Smith maintains that the best practices known at present must be obtained first as a fund of information on which to base the Milwaukee terminal building.

Milwaukee is going to increase steadily as an important grain market, according to W. A. Hottensen, the newly elected president of the Chamber of Commerce. In the face of small and discouraging grain receipts for the last few months, Mr. Hottensen is still able to vision a great future for the Milwaukee market.

In his president's address to the grain men, he stated that one of the reasons why Milwaukee will prosper as a grain market is the reconstruction of Elevator "E."

As a background for the hopes for a great market here, he pointed to the outer harbor project which is rapidly being pushed to completion. When it is completed, he declared that Milwaukee will easily be one of the greatest ports on the Great Lakes. He said the new port would attract to Milwaukee more business than ever before and that is likely to have a very favorable effect on the grain trade here.

A. R. Templeton, who has been head of the Armour grain interests for a long time has resigned to be succeeded by Albert R. Taylor. Mr. Taylor has been in charge of the elevator department of the Armour Grain Company for two years, so that he is merely promoted to a better job. The change does not go into effect until the last day of June.

While strict economy must be practiced in the conduct of the Chamber of Commerce, Mr. Hottensen said that the high standard of service which has been maintained in all departments must be kept up. He mentioned especially the great need of a strong weighing and inspection department, in which lines Milwaukee ranks second to none in the country. He also commended liberal treatment of the transportation department, so that all of the traffic problems of the Milwaukee Exchange can be met adequately.

The Milwaukee Chamber of Commerce Clearing Association has named F. J. Phelan as president, Joseph Lers as secretary, A. L. Flanagan as vice-president, W. A. Hottensen as treasurer, and J. A. Campbell as assistant secretary. The directors of the Association are A. L. Flanagan, H. H. Peterson, B. J. Aston, J. A. Campbell, Joseph Lers, F. J. Phelan and W. A. Hottensen.

TOLEDO S. M. BENDER CORRESPONDENT

SOFT wheat premiums have declined rapidly due to the slow milling demand and weakness of the grain markets. Receipts have been small, though enough for mill requirements. No. 2 Red wheat bids were four cents lower during the past week. The price is lower than at any time since last October. The country has not been selling as freely since the decline started. Outside milling demand has improved some. A few mills who have been out of the market have started to bid for wheat again. The flour trade has picked up a little and some fair sales have been made lately. Many buyers are not willing to get in just now as they feel there may be a further decline. It is generally agreed there are many points of strength in our domestic situation but there are also prospects for large crops.

Millfeeds have been strong and the demand greatly improved. Bran and mixed feeds especially have been higher and in some cases hard to buy. One or two mills have been out of bran and not quoting for several days. Spring feeding has been heavy and this has been helpful to millfeeds. Mixers have also done a good business since spring temperatures arrived. The scarcity of offerings and light mill production has furnished the underlying strength and how long this condition will last no one can tell. Eastern buyers have been especially active and it is likely a good share of local offerings have gone in that direction.

Corn prices are at the low point of the crop but no large cash demand has made its appearance. Toledo quotations have been maintained well in line with competing markets. Receipts have been fair considering the state of the market. Corn has been either greatly improved with keeping quality unquestioned or immature corn carrying a large percentage of damaged grains which is liable to put it out of condition at any time. Choice heavy local grown oats are still commanding good premiums.

Hay market has been practically unchanged during the month and prices remain steady. Dealers report demand slow and receipts light due to the heavy work on farms. The race track trade is just opening up and should cause more activity before long. Choice and No. 1 grades of Timothy have been firm. It is difficult to estimate the holdings of old hay in this section but they are believed to be quite large.

Clover seed trade has been sustained by the lateness of the season. Several hundred bags of cash changed hands during the past week. Some shortage is noted among the eastern trade who have come here recently for their requirements. Clean-up orders are much larger than expected and coming from widely separated sections. Trade has been considerably better than for the same time last year. Prices have held up unusually well in all the markets and especially Toledo. Many dealers and investors interested are wondering what the carryover will be this year. From information gleaned around here it will not be very large and should another short crop be harvested there might be a very strong market developed. Foreign seed will not be available until next November or December so that the domestic

situation will rule. October Clover has been especially strong with trade quite heavy. Some hedges are being put out against cash to be carried over and others have been buying in short sales. Present prices are pointed out as low compared with those during and after the war. They are higher than in pre-war years however. Much of the seed acreage was sacrificed to grain during the war and this caused higher prices. In 1912 October sold above \$12 and in 1919 reached the extreme high of \$35.72½. Last year it ranged from \$13 to \$18.50. The range this year has been from \$14.50 to \$16.70.

Mr. G. Williamson, of the Overland Grain Company, St. Louis, Mo., called at several of the grain offices in this market recently.

Secretary Quinn, of the Grain Dealers National Association, returned from Washington last week where he had been hearing and testifying at the farm relief committees of both the House and Senate.

Senators Frank B. Willis and Simeon D. Fess and Representative Chalmers of this district were all heard from in response to letters sent them recently protesting any price-fixing legislation or bills to destroy the grain trade. They were all favorable for a continuance of the present marketing system.

Grain inspections for the month of April were 351 cars of wheat, 157 cars of corn, 145 cars of oats, 8 cars of rye and 4 cars of barley. Total, 665 cars.

Lester Howard, of the C. A. King & Co., who resigned effective May 1, to become associated with Walter Haskell in the sale of bonds, was presented with a beautiful tin loving cup carefully wrapped the day before he left. Members of the Exchange quickly threw in pennies, nickels, chewing gum and car tokens before he could set it down. J. D. Hurlbut, of the Toledo Grain & Milling Company, made the presentation and later handed him an engraved pen and pencil as a remembrance gift from his many friends on the floor.

The Cleveland Grain & Milling Company recently bought the grain elevator at Mansfield, Ohio, which belonged to the Federal Mill & Elevator Company. This elevator, formerly operated by the Goemann Grain Company has about 1,000,000 bushels' capacity and is of concrete construction with modern equipment.

Ohio boasts of the greatest corn raiser in the country in Ira Marshall of one of the central counties who raised over 1,600 bushels on a 10-acre plot last fall.

Howard Tomlinson, son of the president of the National Biscuit Company, was here during the month to inspect their newly acquired plant, the National Milling Company.

Henry L. Goemann, chairman of the Transportation Committee of the Grain Dealers National Association, stopped off here after attending the two day session of the National Industrial Traffic League, Detroit, Mich., April 21 and 22.

David Anderson, retired miller of this city, Edgar Thierwechter, of the Emery Thierwechter Company, millers, Oak Harbor, Ohio, and Fred Mayer, of J. F. Zahm & Co., spent several days at French Lick Springs, Ind., during the past month.

A. R. Maney, in charge of the Grain Department of the Ohio Farm Bureau Service Company, Columbus, Ohio, was a recent visitor on the exchange floor and at grain offices here.

Much activity has been noted in the Toledo Harbor during the past month and many freighters have unloaded their grain cargoes and will be loaded with coal to go to northern ports. Council will be asked to appropriate enough to widen the channel and deepen same to a depth of 18 feet and also build municipal docks so that larger ships can come here to unload their cargoes. Already some export business has been lost through lack of facilities for big boats it is reported.

Toledo has changed to daylight-saving time to conform to the change made in the time of opening and closing the Chicago market. Seed and grain market will open at the same time as Chicago.

Walter Stone, of the Churchill Grain & Seed Company, celebrated his fifty-fifth birthday by not appearing on the Exchange floor for the usual rites by the paddling squad. Some of the members think that his size made it embarrassing and others that he was afraid of getting too many presents.

Alphonse Mennel, chairman of the board of the Mennel Milling Company, died Sunday evening, April 25, in this city at the age of 77 years. He had been ill about a month following his return from a winter spent in California. Mr. Mennel was one of the most widely known millers in the trade. He came to this country shortly after the close of the Franco-Prussian War in which he fought on the side of France and was decorated for bravery. One of his first ventures in this country was with the Oliver Chilled Plow Company, South Bend, Ind., and he later went to Mansfield, Ohio,

as their representative. It was here that he first came into touch with the milling industry and in the year 1887 joined the Harter Milling Company, Pistoria, Ohio. From that time on, his rise in the milling trade was rapid and in 1897, just 10 years after he entered the business, he bought control of the firm and changed the name to the Mennel Milling Company. During his nearly 40 years in the trade he made countless friends who were inspired by his personality. Young men, especially, appealed to him, and there are many in this section who owe their outlook on life to words or actions that emanated from this kindly man. Late years saw his desire for travel fulfilled and the rigors of the northern winters were softened by several months stay in California or Florida. About a year ago he gave up his title as president to his eldest son, Louis A. and another son, Mark N. was made vice-president and treasurer. H. Wallace Applegate, secretary, is also president of the Exchange this year. His familiar figure on the Exchange floor will be greatly missed and those who have known him for so long will cherish his memory as a soldier, miller and gentleman of the old school. Among the prominent millers who were in attendance at his funeral were Ben Marr, officer of the Millers National Federation, and O. E. Gwinn, both of the Gwinn Milling Company, Columbus, Ohio, and Emery Thierwechter, Oak Harbor, Ohio.

BUFFALO

ELMER M. HILL CORRESPONDENT

TRADING in grain futures, with Buffalo as the delivery point under New York contracts, is to be resumed in July by the New York Produce Exchange after a suspension lasting since the outbreak of the war. It was announced by members of the Buffalo Corn Exchange after receipt of formal notification from the New York Exchange. Arrangements looking toward the completion of details are now being made. The New York Produce Exchange says it can see no reason why New York should not again resume its former position as a leading grain center. Lack of suitable storage and loading facilities caused suspension of the trade at the beginning of the war. A new contract which has been prepared calls for Buffalo delivery of American as well as Canadian wheat in bond and officials of the Exchange believe the arrangement will be attractive both to the eastern milling trade and to exporters. The grain storage capacity at Buffalo is estimated at 35,000,000 bushels and elevator interests here have indicated their willingness to co-operate in the arrangement of facilities to meet the new trade. The revival of this plan will mean much to the elevator interests at Buffalo, especially as the plan applies to Canadian wheat in bond for export.

Opposition of grain and elevator interests at Buffalo against the proposed all-American ship canal connecting Oswego with Albany has already developed. Grain and elevator interests say the proposed canal would develop Oswego at the expense of Buffalo and that this project should be dropped in favor of improvements to the present New York State Barge Canal. The tremendous investment of elevator interests in ter-



83,000-BUSHEL MOTOR SHIP ON N. Y. STATE CANAL

minals for the storage of grain at Buffalo was pointed to by the grain men. Sensing the opposition of the grain and elevator interests at Buffalo, directors of the Buffalo Chamber of Commerce have asked the Harbor Committee to consider the effect of the proposed all-American route on the Great Lakes grain trade and to determine whether improvement of the New York State Barge Canal would be more economical to the state.

Announcement was made at Buffalo early in the month that the Export Grain Exchange at Winnipeg is making a strong effort to send several grain carriers which have wintered at the Canadian Head of the Lakes to Buffalo for the purpose of shipping its cargoes

to New York for export. Under Canadian Government regulations, United States vessels that take advantage of the annual suspension of coastal laws and freeze in at the Canadian Head of the Lakes are required to discharge their cargoes at Canadian ports or pay customs duty on grain. This spring the Richardson firm and W. L. Parrish interests of Winnipeg, large exporters of Canadian wheat, are endeavoring to get permission from the Dominion Government to send several boats to Buffalo without paying customs duty. They point out in their letter to J. A. Robb, Ottawa, Minister of Trade and Commerce, that they are not yet certain that they will want to send vessels to Buffalo but may want to do so when navigation on the Great Lakes opens this month. The Government may not give per-

the American method. When United States grain on its way from Chicago to Europe, enters Montreal in bond, it is examined by a standards committee which fixes the standards for such grain. The United States Department of Agriculture felt that this standard should be made to apply as nearly as possible to the standards which prevail in the United States. United States wheats and other grains going through Montreal for export in bond have run as high as 30,000,000 bushels per year. Last year the figure was only 40,000,000 bushels and the year before, 30,000,000 bushels.

Announcement was made early this month of the purchase of the Wheeler Grain Elevator on the Buffalo



WHEELER ELEVATOR, BUFFALO, SOLD TO TRANSIT FORWARDING COMPANY

mission and may compel grain companies to pay tax if shipment to Buffalo is decided upon. But pressure is being brought to bear upon the Dominion Government for a favorable ruling.

Edwin M. Husted, president of the Superior Elevator Company of Buffalo, died last month. He was born in Buffalo in 1863 and has long been identified with the grain and elevator interests along the waterfront. In 1889, Mr. Husted became associated with his father in the feed business in East Market Street. The Husted Mill & Elevator Corporation was formed in 1898 and five years later the firm purchased the Nickel Plate Elevator. In 1905, the firm name was changed to the Husted Milling Company, continuing as such until the fire and explosion wrecked the Husted mill in 1913. The following fall Mr. Husted completed the Superior Elevator which he operated until he retired last year. Besides his widow, Mr. Husted is survived by two sons, Clifford M. and Paul H. Husted, and one sister, Maud Husted.

Members of the Buffalo Corn Exchange were hosts to a party of 80 leading newspaper editors and publishers of South and Central America on a tour of inspection of the large grain elevators and milling plants along the Buffalo waterfront. The visitors were especially interested in the speed with which the elevators could unload cargoes from lake grain carriers, transfer the grain into bins for storage or railroad cars for movement to the Atlantic Seaboard. The party is making a tour of the larger American cities after being entertained at Washington.

After an absence of two years, Frank J. Peterson has returned to the Great Lakes steamship business under the name of the Peterson Steamship Company with offices in Cleveland. The company will operate a fleet of grain carriers from the Head of the Lakes to Buffalo and Lake Erie ports. When England entered the world war, Mr. Peterson sold his boats to British interests. He then secured others and continued in business until two years ago. After a tour of Europe, South America and a brief residence in Florida, Mr. Peterson has purchased three boats of 3,500 tons each capacity from the Government.

Following a two-day conference at the headquarters of the Montreal Board of Trade under the chairmanship of Leslie H. Boyd, president of the Board of Grain Commissioners, a probable basis for an agreement as to the labeling of United States grain shipped out of Montreal and other Canadian ports has been reached. No particulars of the arrangement were announced by Mr. Boyd. Canadian grading is entirely different from

Creek south of Michigan Avenue by the Transit Forwarding Company. The elevator has a storage capacity of 750,000 bushels and although it was built 15 years ago, it is of modern construction and is rated as one of the fastest elevators along the waterfront. It has wharfage capacity for docking the largest lake grain carriers and adequate railroad facilities. The purchase price was not announced.

Nine acres of waterfront property at Louisiana and Ohio Streets has been purchased by the Hecker-Jones-Jewell Milling Company from T. H. Hanrahan, president of the Buffalo Freight Terminal & Warehouse Company. It is reported that the company plans the erection of a modern grain elevator on the property but officials of the firm refuse to discuss the rumor. A. E. Baxter of the A. E. Baxter Engineering Company, of Buffalo, engineers for the Hecker company, confirmed the purchase. The property has a frontage of 1400 feet.

The Pierce Grain Corporation has been incorporated with a capitalization of \$50,000 in Buffalo. The directors include George E. Pierce of Williamsville; Frederick G. Pierce of Williamsville; and Florence V. Stanley of Buffalo.

C. M. Caldwell of North Tonawanda has closed a deal involving the sale of the Houck Milling Company's property in Buffalo to Tiede Zoeller. There is a frontage of 160 feet on the New York Central Railroad.

Between 600 and 700 feed dealers in the Eastern Atlantic States, members of the Eastern Federation of Feed Dealers will hold their annual convention in Buffalo this fall. Directors of the association were recently in Buffalo to inspect the convention facilities of the city. The Mutual Millers & Feed Dealers Association will meet in Buffalo at the same time. This organization is composed of feed dealers of New York State and Pennsylvania.

The Great Lakes grain carrying fleet got a late start this season due to ice conditions in lower Lake Erie. Early in the month ice fields also were conspicuous in many parts of Lake Superior. During the first week of the month, vessel brokers reported there were neither inquiries nor offerings of tonnage in the Great Lakes grain trade. Grain stocks at the upper lake ports are heavy and a brisk movement is expected soon after the middle of the month. The movement of winter storage cargoes will keep many of the boats at the Head of the Lakes busy for the first two weeks of navigation but shippers will be forced to do considerable chartering in a brief period of time

to relieve the congestion at the Canadian Head of the Lakes.

William J. Heinold has been elected president of the Buffalo Corn Exchange for 1926-7. Other officers elected at the annual meeting of the organization include Henry W. Hudson, vice-president; W. E. Townsend, treasurer; F. E. Pond, secretary and assistant treasurer. These directors were elected for a three-year term. Henry W. Hudson, James G. McKillen, W. E. Townsend; and Harry E. Tweeden for one year to succeed the late E. M. Husted.

An increase of grain stocks was reported at Port Arthur and Fort William during the opening days of the month. Grain receipts at the twin Canadian ports totalled 467,295 bushels for the first week of May while shipments aggregated 272,713 bushels. At the close of April, elevators at the Canadian Head of the Lakes were holding 65,991,573 bushels of grain compared with 49,002,149 bushels for the corresponding period of last year. The most notable increase this year is in wheat.

Grain elevators at Buffalo are in good condition and grain carriers should receive prompt dispatch. All the boats that were holding storage cargoes at Buffalo and Lake Erie ports have been unloaded and a large part of the grain held in elevators has been shipped forward to the Atlantic Seaboard. The buying movement which was listless during the summer months, has been fair all winter.

MINNEAPOLIS

EDWIN O. WELDE CORRESPONDENT

RAIN, which broke a three weeks' dry spell, has practically assured prospects for proper development of seeded crops. Reports indicate that rain fell in those sections in which it was most needed. Continued drouths had retarded germination somewhat, and additional rain is needed over practically the entire Northwest.

Grain interests of this section are prepared to file exceptions with the Interstate Commerce Commission to recommendations of its examiner favoring grain rate increases. One of the features of the examiner's report was a recommendation that a petition of North Dakota grain shippers for preferential grain rates to Duluth for lake movement be denied.

The Northwest Regional Advisory Board which met at the state capitol April 27 will take action on the proposed removal of grain sampling stations at various points throughout the state through a special committee which was appointed at the close of the hearings. The various railroads operating in the Northwest with grain sampling stations at Glenwood, Willmar, Staples and Thief River Falls have proposed to discontinue them because of impaired service to shippers. Many of the members of the board objected, however, and as a result a committee was appointed to meet with the terminal grain committee and work out a plan before May 15. The committee appointed by J. F. Reed, general chairman, is: B. F. Benson, Minneapolis; H. J. Atwood, Duluth; A. J. McInnis, Valley City, N. D.; J. W. Raish, Pierre, S. D.; and J. F. Gustafson, Windom. P. J. Coleman, district chairman, reported that there has been no transportation or service difficulty since the last meeting held in January.

The Bureau of Economics of the Department of Agriculture conducted a hearing in Minneapolis recently with growers and shippers of grain in attendance from Minnesota and the Dakotas, in its campaign to build up the barley export business of the country by establishment of uniform Federal grades. Tentative grades proposed by the Department of Agriculture, as outlined at the hearing, show only a slight variation from the state grades already in use in Minnesota. The penalty for dockage in barley will be standardized, as with most other grains, under both Federal and state grades. No specific dockage penalties on barley is provided in the Minnesota grades, however. Speakers representing the farmers and grain trade of the northwest at the Minneapolis hearing approved the plan for Federal grading of barley, except for a few minor details in the classification suggested by the Department. Barley grade hearings have been held at Los Angeles, San Francisco, Portland, Seattle, Minneapolis, Chicago and New York.

J. George Mann of Northrup, King & Co. has been elected president of the grain and milling division of the Minneapolis Traffic Club; O. W. Galloway, Pillsbury Flour Mills Company, vice-president; and Lee Kuempel of the Traffic Association, secretary-treasurer.

A Federal and state force of about 40 field agents have begun its annual campaign against the barberry as a menace to grain crops. L. W. Melander, leader of the barberry eradication in Minnesota, on his return from a conference in Washington where state directors

discussed the problem, stated that reports from the states east of the Mississippi and north of the Ohio show that barberry eradication is solving the black stem rust problem. Statistics of the work of eradication in Minnesota also tend to bear out this conclusion.

Grain men of Minneapolis, members of the Chamber of Commerce, joined in helping Captain Henry L. Getchell, veteran Minneapolis police officer and manager of guards and door men at the chamber for the last two years, to celebrate his sixty-sixth birthday April 21. Their gift to Captain Getchell was a huge birthday cake. Captain Getchell was a member of the Minneapolis police force for 37 years. For 24 years he held the rank of captain.

At a special meeting April 30, the stockholders of Northrup, King & Co., seed jobbers and feed manufacturers, Minneapolis, voted to increase the capital stock of the company to \$1,500,000. Two new members were added to the Board of Directors, H. H. Williams and J. H. Withey, both active with the firm for more than 10 years. No changes will be made in the management. Two new warehouses have been built in the last two years and a third story is being added to one of the largest warehouse buildings. A nine-acre tract of land at 15th Avenue N. E. and Jackson Street is utilized for buildings providing 10 acres of floor space, and trackage handling 50 cars at a time.

A short course, designed especially for grain elevator men at University Farm, St. Paul, July 13 to 15 inclusive, is open to managers of farmers' elevators throughout the country. The short course program will deal with such subjects as accounting, auditing, hedging, financing, sidelines, grades and dockage, protein content, price policies, and membership contracts. Dr. H. B. Price of the University of Minnesota Agricultural Economics Department, will direct the course. Co-operative grain-marketing in all of its phases will be taken up.

William F. Converse, manager of the Occident Terminal Elevator Company, Duluth, died April 17 from pneumonia. He began his grain career with the Minneapolis State Inspection Department. He was later with Hallet & Carey for 10 years. In the fall of 1923 he took the position as manager of the Occident Terminal Elevator Company, Duluth, and moved to that city. Interment was at Lakewood Cemetery, Minneapolis.

R. E. Tarse, president of the Sterling Elevator Company, returned recently from a winter's stay in Pasadena, Calif.

Robert C. Woodworth, manager of the Concrete Elevator Company, has been elected president of the Minneapolis Grain Shippers Association; James R. Hessburg, vice-president; James A. Gould of the Sheffield Elevator Company, was re-elected secretary-treasurer. A. L. Goetzmann and C. E. McCartney were elected directors.

C. M. T. Stevenson, grain broker, 558 Chamber of Commerce, Minneapolis, has secured a membership in the Winnipeg Grain Exchange. He is now a member of the Minneapolis Chamber of Commerce, Chicago Board of Trade and Winnipeg Grain Exchange.

Minnekota Elevator Company, Minneapolis, is building a 25,000-bushel elevator at Sutton, N. D.

Recent Minneapolis visitors are: Charles B. Dreyer of the Dreyer Commission Company, St. Louis; Dr. W. H. Strowd, secretary of the Soft Wheat Millers Association, Nashville, Tenn.; F. E. Carey of Nye, Schneider, Fowler Company, Chicago; George Barnum of Barnum Grain Company, Duluth; Charles Varga, president of North Atlantic Grain Company, Boston; Jack Allen, manager of the country elevator department of Randall, Gee & Mitchell, Winnipeg; Dewey Walters of the Kansas City wheat department of the Pillsbury Flour Mills Company.

DULUTH

S. J. SCHULTE CORRESPONDENT

STORAGE space in Duluth and Superior elevators is to be increased by around 1,500,000 bushels this season. The Itasca Elevator Company has let a contract to the Barnett & Record Company for the erection of 16 concrete storage tanks at its plant at Allouez Bay. Each tank will have a capacity of 45,000 bushels, increasing the capacity of the plant by 700,000 bushels. The work will be rushed through to completion in time for the bins to go into commission next fall, according to Charles T. Mears, president of the company. The additional storage will increase the company's handling capacity by approximately 50 per cent. The bins will be operated from the company's present workinghouse.

Three changes in memberships on the Duluth Board of Trade were reported during the last month. The membership of W. G. Philip has been transferred to E. R. Balfour, who has returned to Duluth to resume

his old position with the Duluth Shipping Company after a year spent at Portland, Ore. Frank L. Carey has taken over the membership of R. C. Schiller, who has become manager of the Occident Elevator Company, that position having been made vacant through the death of William F. Converse. William Grettum, a former member of the Board, has taken over the membership of G. T. Newhouse, and he will again become active in the trade on this market.

The Cargill Elevator Company has let a contract to the Barnett & Record Company for the building of 21 concrete bins at its Elevator "M" plant at Superior. Around 750,000 bushels additional storage facilities will be afforded, and the bins are scheduled to be completed in time to go into commission next fall. F. E. Lindahl, manager of the company, said that decision to increase the storage capacity of the Cargill elevator system was brought about through a desire to keep abreast of the expanding requirements of this market. After a survey made of conditions over the territory the Cargill interests are looking forward to a substantial gain in its volume of business during the new crop year, Mr. Lindahl said.

The honor for loading out the first cargo of grain for the season here was won by the Occident Elevator Company which shipped a cargo of Durum wheat to a Georgian Bay port for export. A cargo of Spring wheat was loaded out on April 26 from the Occident and Great Northern Elevator "S" for Buffalo delivery. Approximately 2,600,000 bushels additional grain, including Spring wheat, Durum, oats and rye were in addition loaded out of the elevators up to May 6, but on account of bad ice conditions at Lake Erie and Georgian Bay ports none of the steamers cleared with grain before May 5, making the opening of navigation the latest in several years. Now that storage space has been made in the elevators through boat loadings the elevators and commission men are preparing to handle a substantial run of grain from the country during the next few weeks, it being estimated that around 35,000,000 bushels of last year's crop of various grains remained to be handled either from country elevators or from farmers' hands. It has been noted that operators here who had been out of the market for some time on account of lack of storage facilities, have been bidding for grain during the last few days. Plenty of vessel space has been offering on this market so far and the general going rate has been 2½ cents a bushel for Buffalo delivery or 2¼ cents for delivery at a Georgian Bay port.

A new high record was set in the loading out of a cargo of 700,000 bushels of oats from the Globe Elevator on the steamer *Frank H. Goodyear*. They were to fill an export order for shipment via Port Colborne, Ont. The largest previous cargo of oats was 610,000 bushels loaded last fall for winter storage afloat at Buffalo. As a general rule the vessel interests here feel that it will be necessary to cut down loadings of grain on boats this season on account of low water conditions at the Soo and at points on the St. Marys and St. Clair Rivers.

Elevator and grain men on this market were pleased over the announcement that the Northern Pacific, Great Northern and Soo Line Railroads had decided to discontinue the practice of sampling grain cars at Staples, Cass Lake, St. Cloud, Willmar, Sandstone, Thief River Falls and Glenwood to become effective on May 16. Officials of the railroads claimed that the practice of holding cars at sampling points for later shipment to Duluth or Minneapolis, according to where the better prices were obtainable had been abused and resulted in serious congestion during the fall rush. A survey had shown that 97 per cent of the loaded grain ears had been held at sampling points and it was estimated that an investment of \$20,513,500 would be required to provide additional trackage and switching power at them. That it was pointed out by the railroad men would mean an annual outlay to the roads of \$3,050,113 in interest, which would require to be provided through additional charges for moving and handling the grain. Duluth grain men claim that Minneapolis operators have enjoyed a material advantage over the trade here as a result of holding ears at sampling points. They contend that the crowd down there have been able to obtain commissions for handling grain that they later shipped to the Head of the Lakes for storage. In the ordinary run of business, a fair proportion of that grain would have come to this point direct, as the freight charges are equal over most of the western Minnesota, North Dakota and Montana territory involved. Minneapolis has had an especial advantage during seasons of short Spring wheat crops, as millers down there allowed little of the better grade grain to get away from them. The elevators here were consequently left with only the lower grades of Spring wheat to look after, in seasons when the Spring wheat surplus over milling needs was small. That condition was improved during the last season through competition offered by the Occident Elevator Company and Buffalo millers on this market.

Development in the linseed oil trade on this market has led Spencer Kellogg & Sons to let a contract to the Barnett & Record Company for the building of 14 concrete tanks at their crushing plant at Superior. They will be of 1,000,000 bushels, doubling the com-

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pany's present storage facilities. E. R. Rheinberger, manager of that firm's Duluth business, is sanguine that flaxseed production over the Northwest will be gradually increased to a point where it would be sufficient to take care of the great bulk of the American crusher needs. He pointed out that sharp competition between crushers' representatives for seed has always existed on this market and that as a result the payment of liberal spot premiums has been the rule.

* * *

The death of Robert Strachan Wilson, for several years manager of McCarthy Bros.' grain business at Duluth, took place at his home here on May 1. Mr. Wilson was born at Glasgow, Scotland, in 1872 and he came to Duluth 30 years ago. He had a wide circle of personal and business friends who learned of his death with regret.

* * *

Frank Pierce, buyer for the Bartlett Frazier Company on this market, expressed himself as optimistic regarding the early outlook for wheat and other crops over North Dakota, upon his return from an inspection trip over that state. He found that as a result of liberal rains that had fallen over many districts, including near Mandan and Devils Lake, the ground has abundant moisture to germinate the Spring wheat seed and that the situation was regarded as having been greatly relieved from what it was the week previous to his making the trip.

* * *

R. M. White of the White Grain Company expressed himself as gratified over the improving demand for feeds over this territory as a result of the late spring and scanty pasturages, having made it necessary for dairymen and cattle interests to feed more extensively than would otherwise have been the case. His firm's operations in feeds are therefore showing a good increase this spring, Mr. White said. Demand for hay has, however, been light all along.

Farm work is well under way in Indiana, especially in the southern and central parts of the state, where corn is in the ground. Until recently it appeared that the lack of rain would hinder the work in general, and owing to the backward season it was thought that farmers would be late in getting the ground in shape for planting, but after a close survey of conditions it was surprising to see the advance made in the work. Farmers say that the tractors are the only method to resort to in a season such as this, as they can work night and day. Corn was planted in good time to get the benefit of a good rain on Sunday, and oats that appeared to be needing rain badly have been greatly benefited. Pasture lands and meadows were suffering for the want of rain, a short hay crop was predicted unless relief came quickly and pastures looked thin and dry.

* * *

Edward Sheppard, manager of the Cleveland Grain & Milling Company, is very busy getting the affairs of the Elevator "B" in shape, in order that new building can be started. A temporary elevator is being constructed in order to remove the grain from the storage tanks.

* * *

The Mid-West Elevator Company has purchased the salvage from the Cleveland Grain & Milling Company of Elevator "B," recently destroyed by fire.

* * *

The H. E. Kenney Grain Company is still shipping some seed corn to the northeastern part of the state. The company reports a very satisfactory business in this line, and during the past month some large shipments were made. Mr. Kinney reports a good demand for Soft Winter wheat during the past month with receipts very light. The industries operated by the com-

has been destroyed, from reports at the office in the Board of Trade Building.

One of the difficulties in fighting the fire was the lack of water, as the only available was from a small pond more than half a mile from the elevator. At 4:30 in the afternoon, Charles Jones, a foreman at the elevator, made his usual trip of inspection at the elevator and



RUINS OF ELEVATOR "B" WITH POWER HOUSE WHICH PARTLY ESCAPED

revealed no trace of fire, which was about an hour before the men left. The fire was discovered by Ira Salee, the night watchman of the elevator. Owing to the height of the structures and the headway the fire had gained when the firemen arrived at the elevator, there was much danger owing to the collapsing walls.

There is about 400,000 bushels of grain stored in the tanks adjoining the workinghouse, but it is thought to be in good condition. The property and grain are fully covered by insurance. Plans are under way for the construction of a concrete structure to replace the old wooden structure destroyed by fire. An additional storage of 200,000 bushels will be added, making the capacity of the new elevator 850,000. In June, 1918, during the World War, just eight years ago, the elevator was destroyed by fire, which was believed to be caused from an explosion. It was rebuilt later and leased to the National Elevator Company. After their lease expired the Cleveland Grain & Milling Company took over the elevator, and had just completed some improvements, adding a new dust house, a sacking house and oats house, which resembles a country elevator beside the immense structure, and it was here that the fire was first noticed. All machinery and equipment was totally destroyed, and the railroad tracks were covered with grain and sheets of galvanized iron. The dust house escaped destruction and also part of the power plant. As soon as matters can be adjusted and the ground cleared, the new structure will be started.



THE CLEVELAND GRAIN & MILLING COMPANY'S ELEVATOR, BEECH GROVE, IND., BEFORE THE FIRE

pany at Morristown and Fountaintown are now equipped with hammer mills for grinding and business along this line is reported very satisfactory.

* * *

Charles B. Riley, secretary of the Indiana Grain Dealers Association, and also of the Indiana Millers Association, is very enthusiastic over the conference of millers, bakers and home makers, which will be held in Lafayette at the Purdue University on May 18 and 19. "A record breaker in attendance is expected," says Mr. Riley, "and, with the aid of Purdue University, we expect the conference to make a hit."

* * *

On April 20, fire of unknown origin destroyed the Elevator "B" of the Cleveland Grain & Milling Company at Beech Grove, Ind. The fire was discovered at 5:30 o'clock in the oats house and raged fiercely for some time, when finally, the main workinghouse took fire and the two buildings were a mass of smoldering ruins when the fire had run its course. The combined efforts of the Beech Grove fire company and the Indianapolis department failed to have any effect. Attracted by the flames shooting hundreds of feet in the air, thousands of spectators flocked to the scene. Traffic jams developed on the roads leading to the elevator and handicapped the fire departments from reaching the burning structure. Police from Indianapolis were called to the scene and experienced difficulty in keeping the hundreds of automobiles moving.

When finally the tops of the burning elevators fell in flaming masses to the ground, the intense heat drove spectators to a distance and increased the difficulty of firemen. The intense heat caused some of the tile from the adjoining storage bins to peel, and the damage to the grain stored in these bins has not been determined. A temporary structure in the form of an elevator is now being constructed in order to remove the grain from the storage bins, but it is believed that the grain hasn't been damaged. However, the conveying belt has been totally destroyed. About 90,000 bushels of grain



EFFECTS OF FIRE ON THE CONCRETE STORAGE TANKS

ture. Dealers are stocked to capacity, and even a very low price receives a cool reception from all sides, with the result of jobbers and brokers slinging the blues. Hay has been in fairly good demand, especially in the Southern States, while Louisville was asking for high grade hay for the derby meet, and received little response from Indianapolis owing to the scarcity of this commodity.

Commission men report little activity but a fairly good demand for good White and Yellow corn. Mixed and off grade are not wanted at any price, and can only be disposed of at a wide discount. Oats are in good demand with light arrivals, and no advices from shippers; the condition prevailing at this time indicates that shipments will be very light for some weeks to come.

NEW YORK
C. K. TRAFTON - - CORRESPONDENT

THE announcement that the prospect was considered excellent for the resumption of trading in grain futures on the New York Produce Exchange has resulted in stimulating an active demand for membership tickets, inquiries coming from numerous Wall Street houses and also from grain commission firms in Chicago, Buffalo and other markets. As a consequence tickets of "regular" membership, which sold about a year ago at \$1,100, and a few weeks ago at \$1,600, have advanced to \$2,150, at which price a sale has just been reported. There are said to be further buyers at that price and it is doubtful if any seats are available even at \$2,200. In the meantime, "associate" memberships have sold at \$1,900, compared with \$1,500 a few weeks ago.

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James C. Warren of Jenks, Gwynne & Co., members of all the leading exchanges of the country, has been elected to membership in the New York Produce Exchange.

* * *

The Nominating Committee of the New York Produce Exchange has designated the following candidates to be voted on at the coming annual election: For president, B. H. Wunder; for vice-president, R. H. Morgan; for treasurer, W. B. Pollock; for members of the Board of Managers, to serve two years, C. Walton Andrus, Roger N. Black, Frank A. Ferris, Jr., Richard L. Sweet,

H. L. Bodman, H. B. Worthen; for trustee of the Gratiuity Fund, John V. Jewell. For the first time in many years it is stated that an opposition ticket may be named, although it is understood that only a few of the offices are to be contested for.

Joseph Stern, connected with the local office of Faroll Bros., commission merchants on the Chicago Board of Trade, has been elected to membership in the New York Produce Exchange.

George E. Booth, associated with Lamson Bros. & Co., commission merchants on the Chicago Board of Trade, stopped off for a short time on the Exchange floor early this month while on his way home from Europe.

De Witt Roberts, representing Wade Bros., commission merchants and brokers on various exchanges, is an applicant for membership in the New York Produce Exchange.

The members of the Maritime Exchange drew "first blood" in their bowling contests with the Produce Exchange members, but the latter now have "the last laugh," according to latest reports. A special match was arranged between Harry Gere, well-known grain man, the mainstay of the Produce Exchange team, and Rochel, the "star" of the Maritimes. Gere won five games out of seven with an average of about 177, while Rochel averaged about 160. Harry Gere then teamed up with Charles Connor and rolled three games against Rochel and Randle, of which they won the second and third.

The vigorous and interesting sport of bowling has become so popular among the members of the New York Produce Exchange that they have formed a Bowling League. Various groups are bowling on specified evenings each week at various alleys and it is proposed to conduct an inter-trade tournament next fall in which it is expected that teams representing all the various branches of trade on the floor will be entered.

F. A. Miller, a partner in the firm of James E. Bennett & Co., leading grain commission merchants in all large markets, who had been spending a vacation at Virginia Hot Springs, spent a few hours with members of the grain trade on 'Change, while on his way home early this month.

J. H. Brennan, a partner in Stein, Alstrin & Co., commission merchants on the Chicago Board of Trade, was a visitor last month on the New York Produce Exchange, as were the following: F. J. Bittel of J. J. Bittel & Co., Chicago; H. H. Dennis, Chicago; Stanley Jackson of Jackson Bros. & Co., Chicago; Guy M. Chapman of Bartlett Frazier & Co., Chicago; C. P. Randall, Chicago, who has just returned from a European trip; J. P. Hermes, Chicago; Harry J. Renn, grain trader with Jackson Bros. & Co., Chicago, and A. M. Adams, grain trader on the Chicago Board of Trade.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

BUSINESS is fair only with the Louisville grain and feed houses, while the elevator companies are hitting into the dull season of the year, or period in which there is not much grain being carried on storage, while waiting for the new wheat crop to start moving. Present storage stocks are quite light, and mills are not buying much additional wheat, as in some instances they have enough to run through the rest of the old wheat season, provided flour demand is no more active than it now is. Many feel that wheat prices are due for further breaks, on the strength of good growing conditions and prospects for a good winter wheat crop.

With the spring racing season at hand the retailers handling race track business are quite busy, as there are more race horses quartered at the two local tracks than is usually the case, and owners of race horses buy the best there is and plenty of it.

Spring oats planting in Kentucky was light account of wet weather at planting time, and as a result there will be more millet, soy beans and cow peas this year than usual. Cane seed is also moving out well and some sudan grass. Hay crops are doing well as a result of the wet spring, and prospects are for good spring seed yields from such lines as bluegrass, orchard grass and red top, which were in light production last year, resulting in their being high and scarce.

J. C. Marshall, president of the Kentucky Feed & Grain Company, Louisville, recently reported that the company was now marketing its lines of manufactured feeds in 13 states, including Kentucky, Tennessee, Georgia, Alabama, North and South Carolina, Virginia, West Virginia, Indiana, Ohio, Florida, Pennsylvania and

New Jersey. The company is featuring a 24 per cent dairy feed, poultry feeds, etc., and has developed its mill to a capacity of eight bags a minute.

The Kentucky Public Elevator Company reported that it was handling about a normal in and out business on corn and oats at the present time, that is normal for the season, buying having been light, due to good pasturage. Storage stocks are quite low.

Ed Scheer, of the Bingham Hewett Grain Company, remarked that business was quiet out in the state, and that until wheat started moving, it didn't look as though there would be any material activity.

W. A. Thomson, of the W. A. Thomson Elevator Company, recently handled a big realty deal, when he sold for approximately \$200,000, several acres of land surrounding his fine suburban home, retaining about four acres around his house, and selling the rest, which had been held for a number of years.

Brent & Co., seedsmen, at Paris, Ky., who recently purchased the Paris Milling Company plant, which was partly burned a few months ago, are planning to operate the elevator this season for storage of wheat. Just what will be done with the rest of the property has not been announced.

The Ballard & Ballard Company, which some years ago converted the old Raidt corn mills into mills for manufactured feeds, producing stock, poultry, sweet and other lines, has recently started production of a line of pigeon feeds.

Ben Brumleve, former hay and grain dealer of Louisville, who quit that business for the truck business a few years ago, was recently given a testimonial dinner by baseball fans of Louisville, in recognition of his years of fine work for amateur and semi-pro baseball in Louisville, he having served as president of the Louisville Amateur Baseball Federation for several years.

Movement of hay into Louisville by rail and river has been much better in May as a result of harder roads, river movement having been especially good.

Frank N. Hartwell, Louisville grain dealer, who died a few weeks ago at his home here, left an estate of something more than \$100,000.

PHILADELPHIA

WM. A. LOCKYER - CORRESPONDENT

WHILE exports of wheat through the Port of Philadelphia for the first four months of this year are 9,188,624 bushels below the total for the same period of last year, virtually all other grains, except rye, are running considerably ahead of last year's figures. Corn shows an increase of 648,795 bushels; oats have increased 888,013 bushels, while barley has an increase of 181,785 bushels, when compared with the shipments for the four months' period of 1925. Shipments of rye have decreased 562,938 bushels, while exports of flour are 68,322 barrels behind last year's figures.

April exports through Philadelphia included 18,829 barrels of flour; 1,346,654 bushels of wheat; 161,248 bushels of corn; 567,368 bushels of oats; 58,303 bushels of rye, and 36,595 bushels of barley.

Stocks of grain held in public warehouses in Philadelphia on May 1, according to the Commercial Exchange, included 108,867 barrels of flour; 337,851 bushels of wheat; 124,951 bushels of corn; 331,554 bushels of oats; 3,656 bushels of rye, and 1,248 bushels of barley.

The Hallett & Carey Elevator Company has been incorporated under the laws of Delaware and has received a charter to own and operate elevators, mills and otherwise engage in the grain storage business, with a capitalization of \$500,000. The papers were issued through T. L. Croteau, of Wilmington, Del. Another Delaware charter has been granted to the Federated Cereal Mills, Inc., of Erie, Pa., to sell cereals and dairy feeds. This company has a capitalization of \$250,000.

Emmanuel H. Price, prominent local flour and feed dealer, died at his home in this city during the latter part of April, after an illness which extended over several months. Mr. Price, who was 75 years old, was not only one of the oldest members of the Commercial Exchange in point of years, but also in active service. At the time of his death, he was treasurer of the Exchange, which office he had held continuously since 1918. He had been a member of the Exchange for 43 years, 30 years of which he had served as a member of the Board of Directors. In addition he had been a member of some of its more important

committees. Mr. Price, who was president of the Council of the Lutheran Church of the Advent of this city, was a prominent Mason. He is survived by two daughters, both of this city. A committee from the Commercial Exchange attended the funeral services which were held from his late home, 2008 N. Eighth Street, on May 1.

M. F. Baringer, long a factor in the local grain trade, returned this week after an extended vacation which took him to the Philippine Islands. Mr. Baringer, who returned to serve as one of the Judges of Election at the annual meeting of members of the Bourse, also spent some time in California. C. W. Wagar, of the feed firm of C. W. Wagar & Co., also served as one of the judges, and among those who were elected to the Board of Directors of the Bourse, to serve for a term of three years was C. Herbert Bell, of the firm of Samuel Bell & Sons, flour merchants.

Walter Passmore, grain and feed dealer, of Nottingham, Pa., has returned to the floor of the Exchange after a month's trip through the South, the greater part of which was spent in Georgia.

More than 2,000 posters concerning the Sesqui-Centennial Exposition, to open here next month in commemoration of the one hundred and fiftieth anniversary of the Signing of the Declaration of Independence, are being distributed by the Commercial Exchange of Philadelphia among prominent flour and grain dealers of the country. The milling industry expects to have a very elaborate display at this exposition, through arrangements made by Hubert J. Horan, president of the local exchange, and the attention of the trade is being called to this exhibit.

John Gillespie, of the firm of E. K. Lemont & Sons, is again about after an illness which kept him confined to his home for some time.

Local grain interests have been pledged the support of virtually every trade and commercial organization in the city of Philadelphia in their efforts to combat before the Interstate Commerce Commission at Washington this month the plea of Boston and New England interests for a readjustment of the rates on grain and grain products, including flour, moving from C. F. A. territory to the seaboard for export. C. Herbert Bell is chairman of the Joint Committee of Local Trade Bodies which will endeavor to protect Philadelphia's interests in this proceeding. The case, which comes up for hearing at Washington, on May 24, is an outgrowth of the inland differential case which was decided more than a year ago against the Boston interests. In upholding the Philadelphia and Baltimore differentials at that time, the Commission suggested that the railroads might make some improvements in the rates on grain and grain products, moving ex-lake so far as Boston was concerned, but the carriers failed to do so and the reopening of the proceeding is the result. Some very interesting testimony is expected to be presented at this month's hearing.

GRAIN NEWS FROM BOSTON

By L. C. BREED

Herman L. Buss, for 50 years a member of the Boston Chamber of Commerce, of which he had been secretary, died recently at his home in Medford, Mass., aged 70 years. Early in life he engaged in the grain business in Boston as president of the H. L. Buss Company, and remained its head until his retirement from business a few years ago.

The Boston Grain Flour Exchange arranged recently to provide for membership in the Exchange of members under the head of Honorary Members, without payment of dues, the nomination and election of said members to be confined to the active members. Under this arrangement, W. H. Chandler was nominated, and subsequently elected. Mr. Chandler, who for several years was manager of the transportation department, is now manager of the transportation bureau of the Merchants Association of New York.

The seedsmen are exceptionally busy owing to the season being late with the result that business was delayed and will be crowded into shorter time than usually is the case. There is a fair demand from Maine for field grass seed, mainly Timothy and Clover, and a limited demand from Massachusetts buyers for Timothy and Redtop. For grass seed for golf links the demand is normal for the season. Western field corn is in demand and there is some call for Virginia.

Stocks of grain at Boston, in regular elevators as of April 29 were as follows: Wheat, 34,398 bushels; corn, 6,967 bushels; oats, 129,348 bushels; rye, 5,361 bushels; barley, 87,333 bushels.

Corn and oats are slightly easier. Feeds generally ruling somewhat higher owing to lighter offerings. Receipts of Canadian bran at Buffalo have been small, as the mills are not running full and the season for lower freights is near at hand with easier prices for shipment. Spring bran for prompt shipment \$35.50 @ \$36.50.

Receipts of hay are light owing to the bad roads

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that have prevailed at shipping points. The market for top grade is firmly held with some advance for large bales. Medium bales are draggy with some pressure to sell. Among the receipts are a limited number of cars from Canada. Rye straw is quiet but firm. Oat straw is dull. Receipts of hay for the month of April, 1926 cars. Straw, 13 cars.

CAIRO—Reported by M. C. Culp, Chf. Gr. Insptr. & Weighmaster of the Board of Trade:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	931,236	737,915		
Corn, bus...	63,118	13,899	79,996	20,975
Oats, bus...	1,210,316	1,603,774	1,151,958	1,627,655
Rye, bus...	105,253		103,760	

CHICAGO—Reported by J. J. Poncs, secretary of the Board of Trade:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	973,000	962,000	1,072,000	1,318,000
Corn, bus...	3,866,000	3,963,000	1,738,000	4,567,000
Oats, bus...	4,168,000	2,271,000	3,601,000	5,679,000
Barley, bus...	527,000	416,000	286,000	148,000
Rye, bus...	51,000	611,000	13,000	136,000
Timothy Seed, lbs.	1,734,000	1,809,000	1,468,000	2,282,000
Clover Seed, lbs.	819,000	765,000	879,000	383,000
Other Grass Seed, lbs.	1,303,000	1,008,000	1,304,000	627,000
Flax Seed, bus.	93,000	162,000	1,000	
Hay, tons...	13,942	9,733	5,021	499
Flour, bbls...	968,000	857,000	616,000	598,000

DULUTH—Reported by Chas. F. McDonald, secretary of the Board of Trade:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	2,539,903	1,901,191	984,662	3,510,607
Corn, bus...	9,680	182,045		292,363
Oats, bus...	994,976	49,579		1,968,401
Barley, bus...	62,865	141,739		201,067
Rye, bus...	643,339	590,995		1,177,370
Flax Seed, bus.	136,700	170,472	176,966	166,618
Flour, bbls...	216,430	89,515	14,755	98,755

DENVER—Reported by H. G. Mundhenk, secretary of the Grain Exchange:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	801,000	78,000	81,000	46,500
Corn, bus...	167,400	294,500	127,100	125,550
Oats, bus...	136,000	154,000	102,000	98,000
Barley, bus...	35,700	11,900		3,400
Rye, bus...	1,500	4,500	6,000	1,500
Hay, tons...	430	760		
Beans, (C. L.)			282	72

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners for Canada:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	1,806,724	8,081,558	992,599	11,631,034
Corn, bus...	3,132	3,134		3,134
Oats, bus...	286,597	3,998,739	181,356	7,337,561
Barley, bus...	179,071	1,211,521	61,508	3,687,461
Rye, bus...	16,502	196,847		42,893
Flax Seed, bus.	45,909	532,517	1,056	1,268,599

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	163,000	119,000	41,000	63,000
Corn, bus...	1,092,000	750,000	673,000	595,000
Oats, bus...	680,000	572,000	792,000	352,000

KANSAS CITY—Reported by W. R. Scott, secretary of the Board of Trade:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	1,822,500	874,800	1,514,700	2,131,350
Corn, bus...	838,750	723,750	1,547,500	2,677,500
Oats, bus...	243,100	595,000	1,128,000	658,500
Barley, bus...	28,600	19,500	19,000	1,300
Rye, bus...	29,700	1,100	31,900	1,100
Bran, tons...	3,760	5,300	13,760	28,610
Kaffir Corn, bus.	211,200	320,100	196,000	244,000
Hay, tons...	19,320	18,180	7,908	15,648
Flour, bbls...	60,775	52,650	443,300	497,250

LOS ANGELES—Reported by the secretary of the Grain Exchange:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, carloads	224	152		
Corn, carloads	241	99		
Oats, carloads	34	29		
Barley, carloads	228	134		
Rye, carloads		2		
Kaffir Corn, carloads	10	8		
Bran, carloads	108	105		
Flour, carloads	226	181		

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	315,000	123,200	145,112	175,385
Corn, bus...	213,120	356,860	442,673	1,116,748
Oats, bus...	575,640	822,750	452,593	656,186
Barley, bus...	428,320	669,430	107,888	149,941
Rye, bus...	69,335	39,620	47,236	169,641
Timothy Seed, lbs.	4,865	150,000	96,530	112,140
Clover Seed, lbs.	287,450	258,743	161,615	222,955
Flax Seed, bus.	31,460	1,430	1,430	
Hay, tons...	1,008	360	192	252
Flour, bbls...	99,965	78,990	112,540	65,120
Feed, tons...	1,760	17,596	12,663	11,944
Malt, bus...	20,210	11,400	353,077	272,580

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	5,072,700	3,279,670	3,544,120	3,047,870
Corn, bus...	311,770	228,080	318,790	533,160
Barley, bus...	1,245,480	724,390	1,372,380	1,268,920
Rye, bus...	198,950	190,120	136,700	249,330
Flax Seed, bus.	356,900	373,590	174,060	101,840
Hay, tons...	1,856	2,203	332	183
Flour, bbls...	42,149	63,997	891,008	789,423

MONTREAL—Reported by J. Stanley Cook, secretary of the Board of Trade:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	418,309	1,543,710	17,220	
Corn, bus...	16,951	14,799	1,800	
Oats, bus...	347,843	1,242,800	18,592	33,921
Barley, bus...	54,124	382,982		
Rye, bus...		299,451		
Flax Seed, bus.		45,008		
Hay, tons...	32,308	53,554		
Flour, bbls...	145,929	139,270	63,655	258,131

NEW ORLEANS—Reported by S. P. Fears, Chf. Gr. Insptr. & Weighmaster of the Board of Trade, Ltd.:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	103	88,175	2,834,424	
Corn, bus...	98	590,745	338,464	
Oats, bus...	19	39,579	87,450	
Barley, bus...	3			
Rye, bus...	48	63,200	8,571	
Grain Sorghums	1			
Wheat Segs...	1			
River Barge Receipts—				
Corn, bus...		230,246		
Oats, bus...		19,006		
Rye, bus...		47,604		

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	3,613,400	5,307,400	4,208,000	6,198,000
Corn, bus...	120,000	34,500		2,000
Oats, bus...	2,528,000	2,342,000	2,302,000	1,506,000
Barley, bus...	892,500	1,407,600	1,017,000	1,175,000
Rye, bus...	993,000	1,173,000	1,020,000	3,138,000
Timothy Seed, lbs.				
Clover Seed, lbs.				
Other Grass Seed, bags	250		2,175	2,725
Flax Seed, bus.	88,000	124,500		
Hay, tons...	4,281	3,190		
Flour, bbls...	972,883	1,209,626	439,000	

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	637,000	438,200	470,400	515,200
Corn, bus...	1,153,600	393,400	1,453,200	1,524,600
Oats, bus...	348,000	908,000	676,000	1,412,000
Barley, bus...	11,200	19,200	11,200	16,000
Rye, bus...	47,600	18,200	280,000	11,600

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	108,400	33,000	99,600	25,200
Corn, bus...	1,593,250	948,050	871,750	707,550
Oats, bus...	864,000	649,300	1,134,800	715,500
Barley, bus...	126,600	29,400	70,000	19,600
Rye, bus...		1,200	1,200	
Mill Feed, tons	28,680	29,620	36,092	32,392
Hay, tons...	2,910	2,910	980	70
Flour, bbls...	228,600	166,600	205,900	167,100

PHILADELPHIA—Reported by A. B. Clemmer, secretary of the Commercial Exchange:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	803,059	3,239,923	1,346,654	3,373,071
Corn, bus...	119,523	38,905	161,248	
Oats, bus...	822,538	360,550	567,368	113,397
Barley, bus...	14,548	16,731	36,595	16,731
Rye, bus...	48,846	372,246	58,303	450,436
Flour, bbls...	160,469	154,406	18,829	26,621

ST. LOUIS—Reported by Chas. Rippin, secretary of the Merchants Exchange:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat bus...	1,497,600	1,307,800	1,498,000	1,458,800
Corn, bus...	2,231,600	1,401,400	1,729,900	1,233,950
Oats, bus...	2,840,000	2,976,000	2,739,000	2,498,000
Barley, bus...	36,400	52,800	27,200	14,400
Rye, bus...	219,700		168,567	14,000
Kaffir Corn, bus.	32,400	114,000	192,000	109,200
Hay, tons...	11,232	9,804	5,656	4,260
Flour, bbls...	381,890	371,640	396,280	371,310

SAN FRANCISCO—Reported by James J. Sullivan, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1926	1925	1926	1925
Wheat, bus...	3,828	4,017		
Corn, bus...	2,400	1,160		
Oats, bus...	1,192	892		
Barley, bus...	17,017	7,398		
Bran, tons...	271	278		
Beans, sacks...	28,916	17,192		
Foreign Beans, sacks	32,110	9,148		
Hay, tons...	3,186	2,850		

SUPERIOR—Reported by E. W. Feidler, chairman of the Wisconsin Grain & Warehouse Commission:

bus.	32,400	114,000	192,000	109,200
Hay, tons....	11,232	9,804	5,656	4,260
Flour, bbls..	381,890	371,640	396,280	371,310

SAN FRANCISCO—Reported by James J. Sullivan, secretary of the Chamber of Commerce:

	Receipts—	Shipments—
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HAY, STRAW AND FEED

ZOO ANIMALS IN CHICAGO PARK—CAPTIVES FROM FOUR CORNERS OF THE EARTH—THRIVE ON AMERICAN HAY AND GRAIN

A bale a day keeps the doctor away from "Deeday", six-year-old Indian elephant at the Lincoln Park Zoological Gardens in Chicago, Ill. Besides the bale of Timothy and Clover hay, Deeday de-

grains fed. No special kinds of grain or hay are imported although the caged population makes a

private swimming pool, dwells Princess Spearmint, the hippopotamus, who came in the steerage from darkest Africa. She is one of the biggest and most greedy feeders known. Her specialty is bran mash by the bucket full. Alfalfa hay, carrots and the "trimmings" from every other department in the



DEEDADAY WON'T POSE WHEN HAY IS BEING SERVED

mands 10 loaves of bread, six pails of water and any number of dozens of carrots for his daily ration. According to H. Neumann, keeper, this young elephant's capacity is constantly growing and it is only a matter of time until Deeday will consume the amount which Old Dutchess did before her death (age 61) two years ago. She cleaned up two bales of hay a day, one at each feeding, and along with that ate between 15 and 25 loaves of bread, two big tubs of water, and a hamper full of carrots. Director Parker, of the Lincoln Park Zoo, buys about six carloads of hay a season for the hay eating zoo stock. All of the animals are kept in a thrifty condition, so as to present a good display for the public, but they are not overfed.

Cloven hoof animals represent one of the largest hay and grain consuming groups. This stock includes buffalo, moose, elk, deer, camels, zebras or "sacred cattle" of India, and the yak or "grunt ox". All of these are Alfalfa hay enthusiasts, says Herman Schultz, keeper, although some of them are temperamental about their eating. The camel, for instance, will ordinarily take a bale every three days. (Bales at the zoo vary from 75 to 140 pounds in weight). But the older camels get, the more they fast. One camel has just begun to feed again after three and a half months without a bite of hay, grain or other feed, and without water. They live off the fat of their humps, and suffer no ill effects during the fasts.

Corn principally, and oats and bran are the



KEEPER SCHULTZ WITH 21-YEAR-OLD CAMEL

world wide representation of animal life. The wart hog from Australia lives on Iowa corn, Illinois



ALFRED E. PARKER, DIRECTOR LINCOLN PARK ZOO

vegetables, and Chicago baked bread. In the next cage, which is a sort of two-room apartment with



LLAMAS STOLIDLY AWAIT HAY FEEDING TIME

zoo go to her cage. She chews on something most of the time. That is appropriate. She is a gift from William Wrigley, Jr.

Deeday, the elephant, was a donation from the Chicago Boy Scouts, who raised a fund of about \$3,500 to buy the Asia captive three years ago. Among the other animals far from their native stamping grounds, but thriving here in mid-America are the llamas from Peru, in South America, Japanese Sika deer, European red deer, red and white fallow deer (European). All of these go after the domestic Alfalfa hay with same gusto as do the Virginia deer, and Wapiti elk, both North America natives. A moose by the way will eat from two to three times as much hay as an elk.

Very little or no corn is given to the zoo stock in summer. The second cutting hay is supplied plentifully along with a supplementary cooling ration. Keeper Schultz, in the zoo work for 17 years, declares that the second or third cutting of the hay, with the blossoms on, gives by far the best results. He also says the corn grinder is put to good use for feeding the cloven hoof stock. Equipment is also provided on the grounds for oats cleaning and grinding.

"The ostrich is a funny bird," but not so queer either: He is very fond of ground Alfalfa meal. This does not satisfy his hunger evidently, for he has never been known to turn down anything which could be put between the bars. Charley, a monkey in the elephant house, also has a peculiar



ZEBUS, INDIA'S "SACRED CATTLE"



AMERICAN BISON



EUROPEAN RED DEER

taste. He likes to eat cigarettes. Could he get out of his cage he would be only too glad to walk a mile for a camel.

Grains of great variety of course are fed to the birds and fowls. All the better known small grains are used in some way, either in the large bird cages, which house the emeu, or example, or in the cages holding the small parakeets from the tropics. Bright-colored Siberian millet, when it is available, is a favorite with the small birds. Count-



PRINCESS SPEARMINT, HIPPO AT CHICAGO ZOO

ing birds, fowls and animals, there are between 2,500 and 2,600 mouths, of all sizes and nationalities, to be fed at the Chicago Zoo. Thereby hangs the tale of an interesting corner in the hay trade.

HAY MARKET STRONG

In a recent market letter, the Martin Grain Company of St. Louis, Mo., says:

"The Timothy hay market is very strong under continued light offerings with an urgent local demand for the better grades of Timothy. There is also an improved demand for the medium grades both on local account and for reshipment. The local trade being unable to supply their wants with the better grades have been compelled to accept the medium grades. This has created a very strong condition and higher prices are in view for all grades of sound hay.

"Light Clover Mixed hay in scant offering with a good local demand for both No. 1 and No. 2. Heavy Clover Mixed hay steady offerings moderate and demand exceedingly good. Pure Clover hay firm on good No. 1 Pure Clover which is wanted. The lower grades are quiet.

"Alfalfa situation unchanged. There continues an excellent demand for high grade Alfalfa and also a fair demand for the medium grades. Shipments are advised."

NEW YORK FEED MARKET FIRM

By C. K. TRAFTON

Considerable tightness has developed in both bran and middlings as a result of the prolonged delay in the opening of lake navigation. Many Buffalo mills have been running at extremely limited capacity, and some have shut down entirely because of the non-arrival of wheat supplies which were expected to come by lake. Moreover, the continued slow demand for flour has contributed to the restricted output of feed. As far as demand is concerned, conditions are about the same as noted a month ago. Buyers, as usual at this season, are not disposed to anticipate future requirements, still counting on the lower freight rates when lake navigation is resumed and also awaiting the seasonable improvement in pastures. The latter, however, is behind schedule and some traders assert that the unseasonably cold weather has retarded pastures about 30 days. As a consequence a somewhat better demand to cover immediate requirements has been noted in some quarters. This is also partly chargeable to the opinion expressed by some authorities that there is no prospect for any

marked increase in the output of Buffalo mills during May as a large proportion of the much-desired wheat cannot be expected to arrive there for several weeks. Corn products have been held firmly because of the scarcity of bran and middlings. Offers of hominy have not been large and because of the good discount as compared with bran prices good sales have been made. This has resulted in narrowing the difference somewhat. Business in linseed meal has been checked by the continued meager supply, and also to some extent by the fact that producers have been offering only 31 or 32 per cent feed instead of the usual 34 per cent, probably owing to a more general use of foreign seed. Domestic beet pulp has been slow, buyers as a rule preferring the imported at the lower basis. As a consequence the bulk of the limited arrivals from abroad have been sold. Moreover, the bulk of the expected future arrivals is also believed to have been sold. Domestic mills offered little; bulk of feed has come from jobbers.

SWEET CLOVER HAY TRADE EXPANDS

Nebraska and South Dakota hay exports have of late been praising the merits of the Sweet Clover crop in their respective states. The acreage sown to Sweet Clover in several states is now steadily increasing and the trade in this hay is consequently gaining larger proportions. The opinion of one Nebraska state expert is as follows: "Sweet Clover is a very valuable crop for soil improvement, as well as for part of a feeding ration. Many farmers claim that it is more satisfactory for soil improving than Alfalfa."

The roots of Sweet Clover, as shown in the diagram, are large and vigorous and decay very rapidly at the end of the second year's growth. The Sweet Clover roots are able to penetrate such soils and upon decaying leave openings which facilitate drainage and aeration and improve the physical condition of the soil. One of the important uses of Sweet Clover is that of reclaiming alkali soil along river bottoms, particularly in the Platte Valley.

CORN GLUTEN OR OIL MEAL?

Corn gluten feed is coming to the fore as a profitable protein concentrate for dairy ration. Linseed meal may also be profitably used but not necessarily to the exclusion of corn gluten feed. The relative merits of these two concentrates are generally known to elevator managers who sell them as a side-line activity. Yet the following data from an official test in Iowa, is another item of interest on the side of corn.

In the Iowa trial, three cows were used and they were fed for 150 days divided into five periods of 30 days each. During the first, third, and fifth periods they were fed a ration with linseed meal as the protein concentrate. During the second period corn gluten feed was the protein concentrate and for the fourth period coconut meal was used to supply protein.

When corn gluten feed was fed these cows averaged 1.6 pounds more of milk and 2 per cent more butterfat per day than when they were fed on linseed meal. On coconut meal these cows averaged 3.6 pounds less milk and 7.5 per cent more butterfat than when fed on linseed meal.

FEED AT KANSAS CITY SLOW

By B. S. BROWN

After a spurt of heavy buying, due to extremely light stock in both consuming and mixing channels, and light mill operations, which caused an advance of about \$4 per ton in both bran and gray shorts, mill feeds again have become burdensome, and are now declining to what appears to be usual new crop low level. At present stocks in all channels seem ample, so that with continued declining grain prices and abundant pasturage, the supply, while not heavy, will be burdensome.

Present spot prices for bran are \$24.50 to \$25, brown shorts \$25.50 to \$26, gray shorts \$27 to \$27.50 per ton f.o.b. Kansas City, Mo. The extensive interest in and demand for new crop feeds for July, August, and September delivery, has practi-

cally disappeared. Bran for this period was in demand 10 days ago at \$22, Kansas City. Right now there seems to be no interest in the market at \$20 for the same period.

Due to poor prospect in the Soft wheat states, and deficiency in moisture in the Northwest and Canada, eastern buyers, both jobbers and mixers, recently purchased a large volume of summer shipment feed. Wheat mills in the Southwest, where the wheat prospect is abnormally good, seem very willing to make these sales, which were from \$1 to \$3 per ton under last year's lowest prevailing prices.

NEW BARLEY TYPES FOR STOCK FEED

Canada, Alaska, and the northern states are conducting interesting experiments to develop vigorous early-ripening strains of barley with the ultimate purpose in view of making barley take the place of corn as a stock feed where the season is not long enough to make a corn crop secure. Alaska, through its station at Fairbanks, is crossing Siberian, Manchurian, Lapland, Finnish and other northern strains of barley with the purpose of developing a grain that will not lodge and will have more vigor than the present earlier varieties.

The station reports that the earliest varieties, considered the most desirable because of their quick maturity, lack vigor and do not give the best yields. Extensive hybridization has been tried to breed the desired qualities into strains for Alaska and the more northerly stretches of Canada as well as the Dakotas and northern Minnesota. Nearly all varieties of barley mature earlier than do either Spring wheat or oats and the crop can be depended upon even in bad seasons. The seed trade has been watching the barley experiments with much in-



terest and is adding the newer hardy, vigorous bearing types to commerce as fast as they are developed.

Several thousand different crosses have been made and a remarkable variety of types has resulted which are requiring close study and testing to decide upon the superior strains for further growing until a seed supply can be secured sufficient to distribute to the farmers.

THE CHAMPION HAY WHEAT

White Australian or Pacific Bluestem wheat seems to possess all of the requisites of a hay variety. Its popularity is most notable perhaps, in the Golden State. There it is extensively employed for grain production, and is also the variety most often planted for hay in the exporting centers of Alameda, Contra Costa, and San Benito Counties. In the northern mountain valleys it has a general distribution under the name Bluestem, and is there a favorite for spring planting. It is little known either as a grain or hay crop in southern California, where it is generally replaced either by the more drought-resistant Sonora wheat in the interior districts, or by the more rust-resistant Defiance in the coast districts.

As a hay variety it possesses prolificacy and quality, each in a very unusual degree, and is, by common opinion, one of the best of the hay wheats. It matures late and requires more moisture than some of the other varieties, but under favorable conditions produces a tall, leafy growth with beardless heads, and is the highest hay yielder of the com-

mercial wheats tested at Davis. A physical analysis of the hay shows it to possess the highest percentage of leaf, by weight, of any of the wheats examined. At maturity it stands about six inches taller than Little Club wheat. The stalks are coarser than those of Baart or Sonora, but the hay is eaten as readily, and it produced the second highest gain in body weight per pound of the 12 cereals, when fed as an exclusive ration to dairy heifers, and surpassed all other cereals in total nutritive value per acre.

FORAGE FOR FLORIDA'S BOOM

While Florida is still enjoying her real estate boom, agricultural experts there are introducing forage crops of a stature to watch some of the land prices. The Napier and Merker grasses, giants of their family, are well adapted to Florida's climate and soil, and they yield an excellent roughage for use with grain and mixed grain feeds in stock feeding. Napier grass is a native of tropical Africa and was introduced to cultivation by the Rhodesian Department of Agriculture in 1910 and was sent out by the United States Department of Agriculture in 1913. It is also known as elephant's grass and in some parts of Florida as Carter grass. It is a perennial, canelike grass that grows from 6 to 12 feet high. A single plant, under favorable condi-



MERKER GRASS

tions, may produce as many as 100 or even more stalks.

It is propagated from seed or from joints or cuttings. It seeds freely in Florida. Two or three crop cuttings may be made from it, cutting when it is from four to five feet high. It is especially useful as a green feed for dairy animals.

Merker grass was introduced by the Department of Agriculture from South Africa in 1916. It is closely related to the Napier grass. Merker grass seeds earlier than Napier grass. They resemble each other closely and flourish under similar conditions of soil and temperature. Merker grass, it is claimed, remains green longer in the fall than Napier.

CLAIMS CORN BRAN EQUALS WHEAT BRAN AS FEED

The Massachusetts Experiment Station has conducted an experiment to determine the relative value of corn bran and wheat bran. This experiment is reported in bulletin form as follows. "Corn bran, if properly combined in the grain ration, is likely to give as satisfactory returns as wheat bran. It may constitute 30 per cent of the ration."

It should be remembered though that corn bran contains only 5 per cent protein as against 16 per cent in wheat bran. By feeding the corn bran carefully in sensible combination with other materials, to make the proper "nutritive ratio and variety", the Massachusetts station found corn bran equal to wheat bran as a feed ingredient.

SOYBEAN FEED TESTED

Palatability is continually winning more attention as being an important factor in determining the value of any feed. Consumption and digestion depend on it to a great degree. Both ground soy-

beans and soybean hay have remarkable palatability for dairy cattle feeding. The official in charge of a recent South Dakota State feed test, says: "At no time did the animals refuse to eat the ground soybeans even when the soybeans made up 100 per cent by weight of the grain ration. The soybean hay was also readily eaten, although the coarser parts of the plants were left in the mangers. The soybean hay, however, was not as good quality as the Alfalfa hay with which it was compared. The plants were too large and coarse and had some weeds mixed in with them. Judging from the gloss of the coat and general appearance of the cows during the various trials, there seemed to be no physiological difference between ground soybean and old-process oilmeal. During the feeding of the soybeans, the cows gave indication of being in the best physical condition."

NEW YORK HAY TRADE QUIET

By C. K. TRAFTON

There has been no noteworthy change in the broad underlying condition of the local hay trade during the past month. Matters have continued decidedly unsatisfactory to practically all concerned. The chief cause of complaint has been the continued great scarcity of Choice Timothy and Light Clover Mixed. As noted in our previous review, for several consecutive days not a single car of No. 1 was received and on several occasions only a few cars of really good No. 2. In the meantime, although there was no general animation, a good demand was in evidence at times for top No. 2 hay which was generally held at \$26@27, while No. 1 was almost entirely nominal at \$28. Total arrivals at times showed some increase, but the great proportion of it was poor stuff, No. 3 or shipping hay. There has been an unusually wide difference between prices for top and bottom grades, some of the poor "trash" arriving selling as low as \$18. There has been little or no increase in the quantity arriving by river boats owing to the general delay in all water transportation because of the backwardness of the season. Moreover, the general movement from the farms and from interior stations has been retarded by the continued bad condition of the roads.

POULTRY FEED FAKERS BUSY

Poultry "medicine" fakers are again busy in certain sections of Colorado, preying upon farmers of a gullible nature. Because the average farmer does not have time to study poultry diseases, the fake remedy peddled often finds him an easy mark for the salesman.

This business proves so highly profitable that the peddler can afford to run a car from farm to farm selling them. He operates by culling chickens and pointing out diseases to farmers. In return he asks only to fill orders for wares. Such diseases as white diarrhea and cholera, for instance, of course, cannot be cured by drugs. The operator is usually a smooth talker and sometimes falsely claims connection with the college, the Government, or poultrymen's associations to lend credence to his operations.

USE OF SUNFLOWER SEED FOR FEED INCREASES

Grain warehousing has some unsuspected specialties. One such is that of sunflower seeds. This product is used chiefly for chicken feed, for certain oils, and for cattle and hog feeds. In this respect it approaches the value of cottonseed meal without the semi-poisonous properties of the latter when fed to hogs. Sunflower seed was imported to the extent of 5,500,000 pounds in 1921, being drawn in from Russia, Holland, and Argentina. But a duty of two cents a pound was placed on it in 1922, which had the immediate effect of stimulating production in this country.

For the 1923 crop, H. A. Haring, in his book "Warehousing", put the production at from 12,000,000 to 14,000,000 pounds. The most peculiar feature of this crop is that three-fourths of this volume is grown in three counties of southeast Missouri, the

remaining one-fourth being raised in southern Illinois and the San Joaquin Valley of California.

The importance of sunflower seed has been recognized by the United States Department of Agriculture and also by the Missouri Grain Inspection Department. Both have established standard grades for this seed, and in 1923 three sunflower seed warehouses were bonded in the "Show-Me" state and given licenses under the Federal Warehouse Act.

NEW FEED BRANDS

"BIDDY'S BEST" chicken feed, as follows: laying mash, growing mash, scratch feed and baby chick feed. Geis-Price Elevator Company, Inc., Enid, Okla. Filed December 7, 1925. Serial No. 224,328. Published April 13, 1926.

"ROSE'S" animal feed, more particularly dog feed. G. P. Rose, Jr., Nashville, Tenn. Filed March 3, 1926. Serial No. 228,070. Published April 27, 1926.

"GINGHAM" cornmeal, rye flour, pancake flour, breakfast foods of wheat and corn, poultry mash, poultry scratch feeds, dairy feeds, calf feeds, horse and mule feeds and hog fattener. George P. Plant Milling Company, St. Louis, Mo. Filed May 12, 1925. Serial No. 214,216. Published May 4, 1926.

"MINNEAPOLIS MILLING COMPANY" Durum feed and Durum flour. Minneapolis Milling Com-



GINGHAM **BIDDY'S BEST**
YOUR BEST BUY
GRIMES



pany, Minneapolis, Minn. Filed March 1, 1926. Serial No. 227,959. Published May 4, 1926.

"GRIMES" hog feed. John Percy Grimes, doing business as Grimes Milling Company, Salisbury, N. C. Filed February 17, 1926. Serial No. 227,404. Published May 4, 1926.

"GEMCO" prepared dairy and poultry foods. Golden Eagle Milling Company, Petaluma, Calif. Filed February 12, 1926. Serial No. 227,231. Published May 4, 1926.

Trademarks Registered

208,759. Ration balancing preparation for livestock feed. Dr. Fenton's Vigot-Tone Company, Inc., Cedar Rapids, Iowa. Filed September 24, 1925. Serial No. 220,712. Published November 17, 1925. Registered February 9, 1926.

208,869. Poultry feed. The Larowe Milling Company, Detroit, Mich. Filed September 12, 1925. Serial No. 220,196. Published November 24, 1925. Registered February 9, 1926.

209,870. Poultry feed. The Larowe Milling Company, Detroit, Mich. Filed September 12, 1925. Serial No. 220,195. Published November 24, 1925. Registered February 9, 1926.

208,928. Poultry feed. The Park & Pollard Company, Boston, Mass. Filed September 26, 1925. Serial No. 220,862. Published November 24, 1925. Registered February 9, 1926.

209,023. Wheat flour, buckwheat flour, pancake flour, rye flour, Graham flour, cornmeal, rye meal, breakfast cereals, bran and stock feeds. Bay State

Milling Company, Winona, Minn. Filed October 5, 1925. Serial No. 221,229. Published December 1, 1925. Registered February 16, 1926.

209,081. Stock and poultry feed. Washburn Crosby Company, Minneapolis, Minn. Filed October 5, 1925. Serial No. 221,295. Published December 1, 1925. Registered February 16, 1926.

209,254. Poultry feed. The Larowe Milling Company, Detroit, Mich. Filed September 12, 1925. Serial No. 220,197. Published November 24, 1925. Registered February 16, 1926.

209,564. Cereals and cereal products intended for use as food or feeds—namely, laying mash, starting mash, growing mash, chick feed, scratch feed, stock feed, particularly horse and mule feed, dairy feed and wheat flour. Black & White Milling Company, East St. Louis, Ill. Filed September 15, 1925. Serial No. 220,284. Published December 1, 1925. Registered February 23, 1926.

209,773. Horse and dairy feed, stock feed, poultry feed and pearl meal. Heiss Bros., Orleans, Ind. Filed March 3, 1925. Serial No. 210,454. Published December 8, 1925. Registered March 2, 1926.

209,860. Foods for hogs, poultry, cattle and horses. Shaw & Truesdell Company, Brooklyn, N. Y. Filed July 17, 1925. Serial No. 217,531. Published December 8, 1925. Registered March 2, 1926.

211,430. Cattle feed. The Park & Pollard Company, Boston, Mass. Filed November 16, 1925. Serial No. 223,402. Published January 12, 1926. Registered April 13, 1926.

211,606. S and P wheat bran and wheat screenings, S and P wheat mixed feed and wheat screenings, S and P wheat gray shorts and wheat screenings, S and P corn chop. The Rea-Patterson Milling Company, Coffeyville, Kan. Filed November 5, 1925. Serial No. 222,880. Published January 26, 1926. Registered April 13, 1926.

211,653. Mineral feeds. Moseley Manufacturing Company, Louisville, Ky. Filed April 6, 1925. Serial No. 212,280. Published January 26, 1926. Registered April 13, 1926.

211,751. Prepared stock food. The Pro-Lae Milling Company, Des Moines, Iowa. Filed December 5, 1925. Serial No. 224,293. Published February 2, 1926. Registered April 20, 1926.

Trademark Registrations Renewed

49,640. Cattle feed consisting of ground corn and oats. Registered February 13, 1905. Dock & Coal Company, Plattsburg N. Y. Renewed February 13, 1926. Registered December 15, 1925.

51,054. Poultry food. Registered April 3, 1906. The Albert Dickinson Company, Chicago, Ill., a corporation of Illinois. Renewed April 3, 1926. Registered December 22, 1925.

50,447. Stock food. Registered March 20, 1906. Marion W. Savage. Renewed March 20, 1926, to International Stock Food Company, Minneapolis, Minn., a corporation of Maine, successor. Registered April 27, 1926.

SCREENINGS APPEAL BY TREASURY DEPARTMENT

The United States Treasury Department has directed that an appeal be taken from the decision of the Federal Board of General Appraisers which involves the classification of imported wheat and screenings commingled. In a communication addressed to the Assistant Attorney General at the Port of New York, it is pointed out that the board sustained the protest of the importers that the merchandise in question, which had been assessed as wheat at the rate of 30 cents a bushel, was properly dutiable as screenings, at the rate of 10 per cent ad valorem. "The question involved in this case," the Department writes in the communication to the Assistant Attorney General, "was whether the importers had complied with the provisions of the 1922 Tariff Act by segregating the merchandise at their own risk and expense under customs supervision."

NEW WESTERN BARLEY HAYS

Well over 90 per cent of all of the barley hay marketed in California is of the "Coast" or "Common" type, but owing to the influence of experi-

ment station workers in recent years, a large part of this percentage is composed of improved varieties of the common type. "Tennessee Winter", "Four Thousand", and "Bedi" surpass the "Coast" in grain yield, but are so similar to it in appearance that their identity is generally lost sight of, and they become known as common barley.

For hay, however, these varieties are so nearly identical that no significant distinctions can be drawn between them.

Mariout Varieties, on the other hand, which have attained some prominence in California during the last decade, possess more distinctive characteristics. California Mariout was distributed to meet the demand for an early-maturing, drought-resistant barley, adapted to dry soils and climates, and under these conditions it has proved to be a more productive grain crop than the varieties of the "Coast" type, but as a hay producer it is, on account of its dwarf habit of growth, the least productive of the important commercial varieties.

A large feed grinder has been installed by the Witte Feed & Grain Company of Cuero, Texas.

Jim Farley will be in charge of the new feed store which has been opened at Wharton, Texas.

A line of feeds is now being handled by the Dinsdale Grain & Lumber Company of Dinsdale, Iowa.

A new feed mill is being installed by the Williamsburg Elevator Company operating at Williamsburg, Kan.

Cyrus Synstelin and Victor Spitzburg have bought the feed mill of the Melby Bros. at Dalton, Minn.

E. P. Fletcher and D. E. Hatcher have incorporated as the Osceola Hay & Feed Company at Osceola, Ark.

George D. Williams and Chas. W. Hall have sold the feed yard at Mt. Vernon, Ill., to W. T. Forsyth and Ike Vermillion.

A new feed mill and corn crusher have been installed by the Buckley Bros., in their elevator at Wilmington, Ohio.

A new feed store in which a full line of feeds and grain will be handled has been opened by Sparks & Baker at Lyons, Ind.

A 25-horsepower engine and a 9x18 inch four-roller feed mill have been installed by the Farmers Elevator Company of Landa, N. D.

A charter has been granted the Kent Feed & Supply Company of Kent, Ohio, capitalized at \$25,000. Walter N. Heisler is manager.

A new building is to be built at Noble, Ill., for the Montgomery & Bourne Feed Company on the site of the old building which burned.

Capitalized at \$25,000, the Health & Parsons Feed Company has been incorporated at Petersburg, Va. J. H. Parsons is the incorporator.

The Jones-Hettelsater Construction Company has recently completed an addition to the baled hay warehouse of the Ralston-Purina Company at Kansas City, Mo.

A retail feed business is to be conducted at Hastings, N. Y., by Paul Roberts. He opened for business on or about May 15 and will carry a general line of feeds.

New machinery for mixing and sacking poultry feeds has been installed by the Gooding Mill & Elevator at Gooding, Idaho. It will include a power mixer and new grinder.

A feed store has been opened by the Earl Bros. at Morrilton, Ark., under the name of the Earl Bros. Feed Store. It will carry a complete line of feed, flour and fertilizer.

Capitalized at \$7,000, the Kansas City Hay company has been incorporated at Kansas City, Mo. Rice B. Arnold, L. S. Austin and Arnold Bush are interested in the company.

BARLEY TESTS

Many importations of barley have been made for trial in the United States and Canada since the first barleys were brought to this country by the early colonists. The results of all of the varietal experiments with barley in the United States and Canada have been summarized by the United States Department of Agriculture and published along with a discussion of the most important varieties and their adaptation in Department Bulletin No. 1334. A brief history of barley growing in America is also given. The results of past work in testing the various varieties of barley and in developing them for commercial use as presented in this bulletin should be of value and interest to agronomists, and it is

from their point of view that the summary has been prepared.

It is obvious from the volume of the results reported that there has been a large expenditure of funds in the introduction, breeding, and testing of barley varieties in America. The question naturally arises as to how profitable this investment has been and to what extent the varieties so produced and so recommended are in cultivation today. A review of the situation leads the authors of the bulletin to conclude that the investment has already been many times repaid and will continue to be repaid as long as barley is cultivated.

While the four basic types of barley known as Coast, Tennessee Winter, Stavropol, and a relative of the Manchuria, found their way into cultivation without the assistance of national or state investigations and were so well adapted that they have been repeatedly recommended by the experiment stations, newer varieties of superior kinds have recently been introduced and have displaced them to some extent.

Many newer varieties of promising potential value have been produced but they have not been grown for a sufficient length of time to secure figures showing their possible importance. Trebi, a variety now extensively grown in southern Idaho and the irrigated section of western Nebraska, is meeting with popular favor and is giving yields far greater than those of the varieties displaced. Club Mariout, introduced by the Department of Agriculture from Egypt has proven well adapted in California and is replacing the Coast varieties in many instances. California Mariout, likewise, is advantageously cultivated in parts of the San Joaquin Valley which are too dry for high yields of the former Coast varieties. Many superior selections of Oderbrucker and Manchuria have been distributed in Wisconsin, Minnesota, and North Dakota. Alpha, Horn, O. A. C. 21, Minsturdi, Svansota, Featherston, and many more such new productions have yielded extremely well in recent tests and are now appearing in field agriculture. The potential value of such varieties in the next 10 years is very great. Back of these, on the field plats and breeding nurseries, are many others with which much of the work of breeding and testing has already been accomplished.

QUANTITY PAINT OR VARNISH REQUIRED

In estimating roughly the quantity of paint required, varying results are obtained; but there are few elevator men who have not at one time or another required information of that sort. Figures of this kind can only be approximate, as the results depend on the porosity of the surface, as well as the skill and experience of the person doing the work.

In applying a priming coat to wood, the paint is usually thinned with a quart to one-half gallon of linseed oil to a gallon of paint. The priming coat will then ordinarily require one gallon to about 500 square feet. One coat (either over priming coat or over previously coated wood in good condition) will require one gallon to about 400 square feet, and two coats (same conditions) one gallon to about 250 square feet.

Steel surface will take one gallon for from 450 to 550 square feet in the case of one coat, or one gallon for 250 to 300 square feet for two coats. Masonry (concrete or stucco) will consume one gallon for 200 square feet in the priming coat, and 100 to 125 square feet to the gallon if two coats are applied.

The priming coat of varnish will normally demand 400 square feet to the gallon for the priming coat. For one coat (either over priming or previously varnished surfaces in good condition), 450 to 500 square feet per gallon. For two coats, under the same conditions, 250 to 300 square feet per gallon.

Power spraying is usually estimated as requiring about 10 per cent more paint than hand brushing. On the other hand, a skilled spray operator can cover from two to four times the surface of a skilled brush operator, thus saving that much labor.

VARIETIES OF WHEAT RESISTANT
TO STEM RUST

Stem rust, next to deficient rainfall, is the most important factor in limiting yields of wheat in the northern Spring wheat region. This rust may best be controlled by use of resistant varieties, says the United States Department of Agriculture in Department Circular 365, entitled "Relative Susceptibility of Spring-Wheat Varieties to Stem Rust," just issued. This publication is a report on rust experiments with Spring wheat varieties, conducted by the Department in co-operation with various state experiment stations, for the purpose of determining the relative susceptibility of Spring wheat varieties and the distribution of physiologic forms of stem rust of wheat.

The experiments showed that varieties of emmer and certain Durum wheats are more resistant to stem rust than any of the Hard Red Spring varieties. The Khapli and Vernal varieties of emmer, Pentad (D-5), Monad, and Acme, varieties of Durum, and Kota, a Hard Spring variety, are the most resistant. Because emmer is used largely as feed for livestock, and Durum wheats have a limited use, there is urgent need for the development of high-yielding and high-quality resistant varieties of Hard Spring wheat. Most of the resistant varieties are not the highest yielders nor of the best quality.

The Department recommends that Marquis wheat be grown in Minnesota for the reason that it more often escapes rust than does Haynes Bluestem. Red Fife, or Preston and, under humid conditions, usually is more productive than Kota. The adoption of Mindum is advised where a Durum wheat is desired.

In the Dakotas, Kubanka or Nedak should be substituted for other Durum wheats now grown, and, except on rich or wet soils and in northwestern North Dakota, it is advisable to sow Kota instead of Marquis to a considerable extent. For the northern Spring wheat area, except in limited sections, Marquis or Kota is preferable to Haynes Bluestem, Red Fife, Power, Preston, Ruby, Red Bobs, Prelude, and Quality.

The bulletin contains numerous data relative to the occurrence of stem rust, as well as information concerning the resistance of new varieties to the disease. A copy of the publication can be obtained free, as long as the supply lasts, from the United States Department of Agriculture, Washington, D. C.

SOME LOUISIANA REDUCTION
ALLOWED

In a report on a case with the docket title of "Grain and Grain Products from Western States to Louisiana," Chairman Atchison, of the Interstate Commerce Commission states that some of the rate reductions in question are justifiable while others are not. The main proposal involved in the case was to reduce rates on grain and products, seed and seed products, from points in Colorado, Wyoming, Kansas, Arkansas, Oklahoma and Missouri to destinations in Louisiana west of the Mississippi River. The reductions were not to apply to points west of the river contiguous to New Orleans or to that city. They proposed to restrict the routing in connection with the proposed reduced rates from points on the Rock Island, Missouri-Kansas-Texas, Kansas City, Clinton & Springfield, and St. Louis-San Francisco Railroads, or, when in connection with the Southern Pacific lines, so they would not apply over routes through Texas.

Texas flour and grain interests protested on the ground they would be adversely affected. Through error, the report said, the tariffs proposed reductions from all points in Oklahoma on the Frisco. The report said that that road did not desire to reduce rates from points on its lines in Oklahoma west of Tulsa or southwest of Sapulpa, and that it would file amended schedules. The Missouri Pacific and the St. Louis-San Francisco, the report said, defended the proposed reductions. The Mis-

souri Pacific said the revision would correct maladjustments, remove fourth section departures and restore long established relationships, which had been disrupted as the direct or indirect result of Commission orders. The report said that the effect of the proposed rates would be to restore the basis in effect from the origin territory prior to April 1, 1922; remove many fourth section departures and harmonize a maladjustment of rates in the destination territory.

In disposing of the matter, the commissioners said: "We find that the proposed schedules, except those publishing rates from points on the Missouri-Kansas-Texas Railroad, Chicago, Rock Island & Pacific Railway, and the St. Louis-San Francisco Railway, have been justified. We further find that those publishing rates from points on the three lines just named have not been justified."

TRANSIT PRIVILEGES FOR FEED

While there are a number of ingredients of feed that are not ordinarily to be found in a typical tariff covering milling in transit privileges, still there are close to 100 specified. Prepared feeds are required to contain at least 60 per cent of the ingredients listed as grain or grain products, and complete records of the mixtures are required to be kept by the transit house operators, subject to inspection. Professor Wilson says, in commenting on shipments of feed receiving the transit privilege:

When the inbound articles included in the lists of commodities eligible to receive transit privileges, including transit tonnage, non-transit tonnage, or both, that are mixed or blended with not more than 40 per cent of other commodities, the outbound shipments, equal in weight to the tonnage of the eligible articles, may be forwarded against the freight billing of the inbound carriers issued to cover any eligible commodity entering into the mixture or blend. The through rates from points of origin to final destinations, via the transit points, are assessed on such shipments. On the excess weight above the inbound grain tonnage, the local carload rates applying on prepared feeds, including animal, poultry, or pigeon, as described in the lists of eligible feed commodities published in the tariffs, are assessed from the transit points to final destinations.

Outbound shipments that contain more than 40 per cent of commodities, not included in the eligible lists, are rated at the full local rates from points of origin to the transit points and from the transit points to destinations. Shipments of mixtures of transit and non-transit grain, when the identity of each has been preserved, may be made, as in the case of milling and malting house mixtures, at the through rates from points of origin to destinations via the transit points on the transit portion, plus the local rates from the transit points to destinations on the non-transit portions. Each carload shipment is subject to the highest carload minimum applying to any commodity in the carload.

When shipments of grain originate at points so located in relation to the transit points as to involve out of route or backhauls, the charges on the shipments of the grain to the transit points are adjusted by the addition of arbitraries varying with the length of the out of route hauls. In such instances, the outbound rates applicable to the outbound products from the transit points to destinations are used and the inbound rates on the grain to the transit points are reduced to an arbitrary basis. Thus, if the rates properly applicable to the products from Millington to New York is, let us say, 30 cents a hundred weight and the local rate on grain from Grainville, and intermediate point 40 miles from Millington, is 10 cents, the through rate would be composed of the factor 40 cents from Millington to New York plus an arbitrary of 3½ cents a hundred weight from Grainville to Millington, instead of the local rate of 10 cents. The aggregate rate would be, therefore, 40 cents plus 3½ cents, or 43½ cents a hundred, instead of 40 cents, plus the local rate, 10 cents, a total of 50 cents a hundred.

In addition to the through rates from points of origin to destinations via transit points, sometimes charges are assessed for the privilege of stop-off.

GRAIN LABELS DISCUSSED

Following a two-day conference at the Montreal Board of Trade rooms on the first week in April, under the chairmanship of L. H. Boyd, president of the Board of Grain Commissioners, a probable basis for an agreement to as to the labelling of United States grain shipped out of Montreal and other Canadian ports, was developed. Canadian grading is entirely different from the American method.

When United States grain, on its way from Chicago to Europe, comes into Montreal in bond it is examined by a Standards Committee, which fixes the standards of each grain. The United States Department of Agriculture felt that this standard should be made to apply as nearly as possible to the standards which prevail in the United States. United States wheat and other grains going through Montreal for export in bond, have run as high as 90,000,000 bushels per year. Last year the figure was 40,000,000 and the year before 30,000,000.

INCREASED ARGENTINE CORN
PRODUCTION

The Argentine corn crop is placed at 279,000,000 bushels in the first official estimate received by the United States Department of Agriculture from the International Institute of Agriculture. The crop is an increase of 92,702,000 bushels over last year's low production of 186,298,000 bushels.

Allowing 80,000,000 bushels for home consumption and seed requirements, about 200,000,000 bushels will be left for export and carryover into the next season. Actual exports last year amounted to 142,000,000 bushels from the small crop of 186,000,000 bushels. This large export, however, was apparently due to a large carryover from the good crop of the previous year.

Yield per acre based on the first estimate is 26.3 bushels in comparison with the low yield of 20.3 bushels last year and 25.6 bushels the average for the past five years. The bumper crop of 1914, when production reached 325,178,000 bushels was due to large acreage and the high yield per acre of 31.3 bushels.

IMPROVING THE SOYA BEAN

By special treatment a Hungarian chemist, Dr. L. Berczeller by name, hopes to make the soya bean more generally available as a foodstuff. Heretofore soya bean flour, although of high nutritive value, has become rancid and indigestible in a short time.

Under Dr. Berczeller's method, the bean is peeled and the catalytic agents are driven off by evaporation in the presence of steam. The treatment is equally adaptable to soya bean flour or the soya bean.

The physical properties of the product are a yellowish color and the flour has an agreeable taste, similar to paste prepared from nuts. The flour is dry to the touch and is stated to be rich in vitamins.

FEED TARIFF RULES

The Treasury Division of Customs has ordered the application of an import duty of 15 per cent ad valorem on a specified ground feed. The collector of customs at Portland, Maine, was subsequently advised as follows:

The department is in receipt of a letter from the director of the special agency service inviting attention to a variance of opinion between the acting appraiser at Haleb, Maine, and the appraiser at New York in the classification of merchandise described by the acting appraiser at Haleb as ground feed which it appears was entered at the rate of 7½ per cent under Paragraph 730 of the tariff act but which the appraiser at New York would return for duty at the rate of 15 per cent ad valorem.

Your acting appraiser, however, expresses the opinion that the proper rate is 10 cents per 100 pounds as the merchandise consisted solely of a mixture of grain and contained no oil cake meal.

The department is in receipt of a letter from the collector of customs at New York transmitting a report from the appraiser in which he states that the merchandise under consideration is a feed consisting of oat hulls and meal and is believed to be entirely derived from oats with the exception of a slight percentage of impurities, and he accordingly expresses the opinion that the merchandise is dutiable at the rate of 15 per cent and that the entered rate of 7½ per cent under the proclamation of the President is applicable only to by-product foods obtained in the milling of wheat.

THE sales tax in Canada on pot and pearl barley has been removed. No reference was made in this notice of April 16, relative to duty on wheat for milling in bond.

ASSOCIATIONS

LIVEST CONVENTION IN QUARTER CENTURY HELD BY WEST- ERN GRAIN DEALERS

Any member of the Western Grain Dealers Association who came to Des Moines, Iowa, April 19, 20, 21, for the twenty-sixth annual meeting and expected three days of cut and dried convention procedure, was due for a shock. Before final adjournment there was discussion on the moot subject of



SECRETARY N. S. BEALE AND WIFE

divorcing the insurance and straight association activities of the organization, and this matter was referred to directors for action. The state of Iowa was districted into nine divisions, and the Board of Directors chosen from them. The idea of industrial alcohol manufacture from corn, introduced informally at the convention, gained unexpected headway, and broke into the front pages of the Des Moines dailies, as did the able address of J. W. Coverdale who appeared before the convention April 20. The convention was also asked, through the Des Moines papers, to support the plans for reopening the Iowa Corn Products plant.

Perhaps there is some unwritten law forbidding the mention of association politics in convention writeups, but this was a feature of the conclave which could not be missed. A member from Keokuk, Iowa, developed into the high klieg of discussion starting. He was not allowed to go unmolested, Ray Murrel of Cedar Rapids, frequently crossing his path. A rule or two were changed. Some arguments were left up in the air. Some members registered irritation at what they called "wrangling". Others were glad of the free discussion which, while amusing at times, was a clear indication of the Association's vitality.

To President Clifford C. Belz, of Conrad, Iowa, belongs the credit of handling the lively business of the convention with skill, tact and coolness at all times. His address to members April 19, was an interesting sequence of comment on developments in and outside of the Association. After paying a full tribute to the late George A. Wells, President Belz said:

Following the death of Mr. Wells the association remained without a secretary for some time as a token of respect to his memory. Your officers and directors felt that much depended upon the final selection of the man who was to assume his place, and did not wish to make any hasty moves that might be regretted later. Finally N. S. Beale, of Tama, Iowa, was persuaded to act as secretary without salary, and D. O. Milligan was secured as active secretary in charge of the work. We bespeak for Mr. Milligan your encouragement and support, and urge that you lend him all the assistance in your power. We have found him to possess a pleasing personality and to entertain some splendidly practical ideas for a larger, better, and more efficient association.

Excessive Speculation

It is indeed unfortunate that the public, and more particularly the farmer, banker, and business man, do not fully understand the efficiency and economy practiced by the grain trade with reference to the legitimate use of the future markets as a basis for buying, selling, and hedging actual grain in store. The inherent element of speculation can never be entirely eliminated from its production and commercial distribution, but we must learn to differentiate between hedging and speculation. We admit that excessive speculation is a constant menace that should be restricted, if it can be accomplished legally without detriment to the operation of a broad open market, but the boards of trade in the various terminal markets have a vital function to perform and must be protected.

The independent grain dealer has no quarrel with the

farmer nor with any farm organization. Our welfare lies in the prosperity of the community in which we reside and in which we conduct our business. But we are entitled to certain rights and privileges under the Constitution of the United States of America, and when those are assailed by certain would-be reformers we are forced to rise and defend them. However a closer application of the Golden Rule to our fellow man will alleviate much of this spirit, and make this grand old U. S. A. a better world in which to live.

The Des Moines Conference

Some time ago Governor Hammill of this state called a conference here in Des Moines for the purpose of discussing farm relief measures. He had a number of brilliant speakers present and served them and others his celebrated corn dinner. It is not my purpose to discuss or criticize the results accomplished, but I do wish to call attention to the fact that the delegates who attended at his invitation were presumed to be vitally interested in the situation, and yet it is a significant fact that the Western Grain Dealers Association, which is composed of independent dealers all over the State of Iowa, the Dakotas, and Nebraska, was not recognized either through the Association or by any official thereof.

Freight Rates

Freight rates on grain, which are generally regarded as excessive, is a topic for discussion at practically every



PRESIDENT CLIFFORD C. BELZ

convention where grain dealers assemble, and is the cause of much dissatisfaction to both shipper and producer. At the same time the increased cost of operating the railroads, due to higher priced materials used in maintenance, better pay for employees, building hard surfaced roads parallel to the short freight hauls, and the increased use of the automobile and truck, have reduced the revenue of the freight and passenger depart-



IN ATTENDANCE AT THE DES MOINES MEET—LEFT TO RIGHT—J. W. COVERDALE AND STEVE WILDER, CEDAR RAPIDS; CHAS. EDGINTON, GILMORE CITY; GEO. C. MARTIN, JR., ST. LOUIS; ASST. SEC. MILLIGAN, DIRECTOR GEORGE MOULTON, FONDA; P. J. HARVEY, GOWRIE, IOWA.

ments until the question arises in my mind whether the rates can be substantially reduced without curtailing the efficiency of the carrier. The railroads are an absolute necessity to the grain trade, and have had more to do with the commercial development of this country than any other one factor. We need the railroads and they need us, and let us hope that a happy solution of this important problem may be evolved by the master minds at an early date.

Hard Times

Our so-called "Hard Times" are more in our own

minds than a reality, and have been brought largely upon ourselves through our own actions. This great commonwealth was founded and prospered on Perseverance, Thrift, and Industry, and when we go back to that old-fashioned method of spending less than we earn just so soon will "Good Times" return.

Following the president's message came D. O. Milligan's report as assistant secretary to Secretary N. S. Beale, Tama, Iowa. It was generally conceded at the convention that Mr. Beale has made a substantial contribution to the prosperity of the organization by his activity in outlining a safe and sane and economical policy for the office end of the W. G. D. A. work. The practical ideas of D. O. Milligan have also won approval. He said:

A number of members have been directly benefited during this short time through the handling of such matters as railroad leases, disputes with terminal dealers, securing information for filing of claims and adjusting misunderstandings between shippers. Please keep in mind that this service is yours for the asking.

The 1926 Directory which we have just published was started, the new lists of grain dealers made up and checked four different ways so as to be as accurate as possible. I believe we are justly proud of this directory as it is neat and accurate besides a financial profit to the Association. \$781 worth of advertising was subscribed by our friends in the terminal markets along with the assured sale of \$250 worth of directories, making a gross credit of \$1,031. From this must come the charge of \$510 for printing, thus leaving a net profit of \$521 for the Association. Also it must be kept in mind that each member is furnished a copy of the directory free of charge.

A close tab has been kept on the national situation regarding the farm relief bills now presented but upon the advice of our national committee no action has been taken. They advise us that "Watchful Waiting" must be our policy until such time as some one of the numerous bills gains prestige enough to become really dangerous.

Your secretary has traveled over as much of the territory with the insurance company inspector as the road would permit, so as to become personally acquainted with the members and to hear their views as to the future plans of the Association. Of the approximate one hundred members visited nearly all are of the same opinion as myself, that the Association should organize and sponsor district meetings, that the secretary should visit all members at their place of business at least once a year, and those who handle coal are desirous of having the association take up their coal matters for them. It is by these expressions and in correspondence with other members that our policy for the coming year has been determined.

The proposed change in the by-laws increasing the number of directors from five to nine is to facilitate establishing district meetings throughout the state. The idea in our mind is to have the directors scattered throughout the membership as far as possible so as to have a director or an officer in each district. In other words, we wish to put the Western Grain Dealers Association on the map as the most active state organization in the grain trade. Properly organized district meetings will go further in benefiting the grain merchants than any other one thing. Let us put this district organization over in a big way. You will benefit financially from it.*

Full account was given by Mr. Milligan of financial receipts and disbursements during the past year. As this is a "family matter" for members, mention only need be made here that the treasury is in excellent condition. No memberships are being turned down, however, says Mr. Milligan. The reports of the officials concluded the morning program and adjournment for luncheon was made. The convention headquarters for Lamson Bros., on the same floor as the convention hall, was a popular place between sessions. Market wire service was provided there.

*The assistant secretary also referred to the case of Iowa vs. J. C. Folger, grain dealer. The latest developments on this will be published in the June issue.

AFTERNOON, APRIL 19

After a representative from the Des Moines Chamber of Commerce had welcomed the grain dealers, Charles Clark, and Frank Ely, both of Chicago gave brief talks before the convention. "The Elevator Operator's Margin" was the subject of Mr. Clark's address. He stressed the fact that striving

for grain volume without regard for legitimate profit, was a poor and too common policy in the grain trade of the Middle West. This type of cut throat competition he condemned.

Sample trays of high grade oats were available on the speakers' table to supplement Mr. Ely's address, "The Necessity for a High Standard of Oats". In part he said:

Iowa is a wonderful oat state and I hope she will

put forth every effort to conserve her land and oats seed. There remains a place for oats and a large place for good oats. Virginia is known for its pea-nut ham and for its peanuts; Florida for its grape-fruit; California for its big trees; let Iowa come across with her oats. Let us have better oats for Iowa and better Iowa for oats.

If a yellow oat is most desirable and most adaptable to Iowa soil and climate, I would suggest that you investigate, very seriously, Yellow oats grown in the vicinity of Rockford, Ill. I have a sample with me that will be at your disposal. These Yellow oats, if not too badly stained, will grade 2 White Oats year in and year out. The berry seems to be large and plump. The eastern trade is not very keen for these oats but will buy them and pay a fairly good price, owing to the largeness and plumpness of the berry.

As a general thing, the oats coming to Chicago from Iowa have a very small, thin berry, exceedingly yellow, quite heavily mixed with wild weed seeds, and they generally bring the low price in the market, unless from some few stations carrying with them a specially favorable freight rate to southeastern points.

Oats are sold more by sample and less by grade than any other cereal on the market, and for this reason they should be properly loaded, so a fair average sample can be drawn and placed upon the market on their true merits. If the shipper fully realized what a plugged car means to a buyer I think he would discontinue this practice on the general principle of manhood. It is hardly the time and the place for me to enumerate the annoyances that many of us have had with these plugged cars and I think, in very many cases, the shipper is a loser, both morally and financially. I think there is a tendency among buyers to discourage and penalize persons who pursue this practice.

"Railroad Claims and Their Status" was the subject of John Baker of Kansas City. Among his many practical suggestions was that of adopting a uniform bill of lading such as is generally used in Kansas today. This would do away with affidavit claims, the speaker said. The number of dumps, pounds of grain per dump should be shown, and also the two automatic scale readings. "That record will stand in the highest courts of law," declared Mr. Baker. He cited evidence to show how much time, money, and energy railroad officials were putting forth in order to reduce grain losses, and suggested that in most cases, grain claims received fair treatment.

At this point in the session, President Belz thanked the speakers and announced committee appointments. He then asked for discussion, and by the ensuing exchange of comments, it was proven that the attrition mill for sideline operation is becoming more and more popular. Operation of seed cleaning machines was also generally commended.

MORNING, APRIL 20

Industrial alcohol manufactured from corn, was the dark horse entry of the convention. This subject was taken up informally Tuesday morning, and the idea received support from several sources. Leon W. Ainsworth of the Des Moines Board of Trade, urged grain dealers to aid in the effort for legalizing the production of corn alcohol motor fuel. The contingent of grain men from Cedar Rapids seemed solidly back of the proposition. A resolution endorsing the manufacture of corn alcohol for industrial purposes was adopted Wednesday morning by the convention. Facts on the use of corn for industrial alcohol were submitted as follows by Steve Wilder, of Cedar Rapids:

The enormously increased American domestic demand for industrial alcohol, due to the development of the chemical industry in America, principally to the artificial silk and artificial leather business and likewise also to the new cotton lacquer as a substitute for varnish on automobiles, would be of immense value to the farmer in helping his corn price if political and other considerations did not intervene to prevent the farmers'

crop, but it is a good sized percentage of the crop that moves to terminal markets.

The tendency of the prohibition enforcement authorities to disregard the industrial alcohol except in the light of a potential intoxicant, has practically ended investment in industrial alcohol plants and has destroyed a number of the very large industrial alcohol plants in the Middle West which formerly consumed corn.

Molasses is so cheap that alcohol cannot be manufactured from corn in competition with it. Furthermore, if some means were found to foster the industrial alcohol business and to separate it completely from the entanglements with prohibition so that it might proceed to its normal expansion it would not be long before a double purpose would be served, since an alcohol motor fuel would be put on the market.

It is possible now to produce an alcohol motor fuel that from the standpoint of cost per gallon can compete with gasoline. This fuel is a blended fuel and contains kerosene in its makeup. This is necessary because the present automobile engines are designed for a compression strength predicated on gasoline.

Alcohol, said Mr. Wilder, will stand much more compression before igniting and a properly designed alcohol engine will give one-third more power, which means one-third more mileage. Alcohol could be sold at 33 1/3 per cent more and still be equal in cost to gasoline.

AFTERNOON, APRIL 20

John W. Coverdale, former official of the \$26,000,000 Grain Marketing Company, and farm bureau organizer, who is now conducting a private grain business in Cedar Rapids, Iowa, gave the following valuable address:

Prosperity for the Middle Western grain producer or dealer will not come from Washington; neither will it come from new methods of marketing unless founded on sound business practices worked out by years of experience in that industry. Artificial methods of price control may be of assistance temporarily, but in the long run, only tend to unbalance the industry.

The development of home industry that will take the raw products of the farm and turn them into a highly concentrated form will do more for Iowa in establishing

Iowa's surplus. We have long freight hauls, and when the raw product is transported a long distance to be turned into a concentrated food or industrial product, we find a large part of the gross returns consumed in transportation. A hundred-pound box of bacon or ham represents about 11 to 12 bushels of corn, and is in a concentrated form easy to transport to the district of consumption. This form of production can stand a higher rate of transport costs than the raw product.

One bushel of corn transferred into sugar, syrup, starch, gluten feed, and many other by-products is greatly enhanced in value and requires the labor of a large number of families, who, in turn, spend their earnings in the community in which they live. The many uses of oats and other grains bring about similar results.

The manufacture of alcohol formerly consumed large



LEFT TO RIGHT, H. M. BARLOW, S. A. STEENSON, BERT COLLINS, K. B. PIERCE, R. S. TURNER, AND FRED W. MUELLER

quantities of grain, however, before Volstead cut off the manufacturing of same, black strap molasses from outside the states became a lively contender for the distiller's market. So far industry is not using up that portion of grain which formerly went through the distilleries.

Would it not be a splendid investment for the State of Iowa to appropriate \$1,000,000 for use in industrial research with grains, this research to be headed with men like Sweeney at Ames, who has already done so much with corn sugar, corn paper, furfural, and many other discoveries; all new developments from the research to be protected by royalties sufficient to make the research work self-sustaining.

The State of Iowa has better than 200,000 farms, according to the census, and each of these farms pours its surplus grain on to the market. These 200,000 grain faucets run into about 1,700 country elevators. As it is now, these 1,700 larger faucets empty their grain into the terminal grain markets of Chicago, Milwaukee, St. Louis, and Kansas City, without any regulation, a portion going to Cedar Rapids.

Out of the 1,700 country elevators in Iowa, we find in some towns as many as four or five houses competing with each other. Consolidation at 600 stations having two or more houses would save in overhead expenses better than \$2,500,000 per year. Two and one-half million dollars is better than 6 per cent on a \$40,000,000 investment, or 10 per cent on a \$25,000,000 investment.

A consolidation of two-thirds of the country houses in the grain belt would save in overhead better than \$30,000,000 annually. Consolidation of 600 Iowa houses would provide a \$6,000,000 company with 24,000,000 bushel cheap storage, and place the state in position to bid for export business, which she cannot now do.

As I understand the situation in this state, a further step would be advisable. There are logically about five or six natural concentration points in the state, namely Cedar Rapids, which is the largest industrial user of grain in the state; Sioux City, which works to the Southwest; Des Moines for central state working South and Southwest; Burlington Southeast, and possibly Omaha and Davenport with offices.

One of the big present day questions in agriculture is co-operative marketing and co-operative merchandising. Our past economic unbalance has caused a large number of our people to believe that our marketing systems are wrong. Perhaps they are; some more than others. This same complaint has been common in every economic depression since history records the actions of mankind. Co-operative marketing, if rightly conducted, will do much to bring about the standardization of product in quality and uniformity, which are both necessary before good marketing can be practiced. The friends of co-operative marketing have been its worst enemies, because they have oversold it in practically every case to the farmer as a panacea, or cure-all for all his trouble. Co-operative marketing as it is now being conducted requires special privileges through legislation, and at once becomes the target for its competitor in business, and, so far, has not been able to meet the competition.

The object of co-operation is to seek the best market at the least possible cost, and to return the surplus earnings to the member on a pro-rata basis. Experience has taught me that the farmer cannot keep his cake and eat it too. He must learn that he must pay well for the use of capital, whether he borrows it or provides it himself.

Co-operative marketing is much like Government ownership and operation. It requires much overhead and loses efficiency as it increases in size.

The marketing enterprise that succeeds in a community over a period of years is the enterprise that renders satisfactory service to the public of the community. The future of the grain merchant will depend on how well he renders that service to the people of his community. Whenever and wherever there is talk of competition, then it is time for that enterprise to take inventory of the situation and find out what is wrong, and then immediately proceed to correct it.

As a general rule the people of the community are swayed by some local leader of influence with an ax to grind. However, there are many cases where the local merchant has been to blame and what he has done often creates suspicion at other points.

Yes, there is a bright future for the grain merchant when he fully awakens to the situation, and learns the full meaning of co-operation as the farmer must learn by years of experience that co-operation is not the putting of the other fellow out of business. The economic function of a market is to secure a price which equals supply and demand influences.

The Corn Area Committee, in their resolutions propose to double and treble the world export of corn. The proponents of the bill say, "Send it over, get it out of the country, regardless of price." There can be but one result from such a course. The European farmer can get his feeds very much cheaper than the Iowa farmer would get his; the European farmer would have lower costs of production than would the Iowa farmer.



C. A. BULPITT, FT. DODGE; C. C. BUCK, IOWA FALLS; C. L. KNOX, CASEY.

a higher stabilized price level (thereby creating a permanent prosperity) than all the legislative and marketing nostrums combined.

The recent attack from Washington by the corn area group has given Iowa a set-back that will take years to overcome. This pilgrimage has made Iowa the laughing stock of the nation. What looked at one time like a grand stand play has fizzled, and instead has caused the resources of the East to be held in abeyance until Iowa again goes to work and proves she is sound, conservative and constructive.

The Iowa counties that suffered less as a result of the depression of 1920 and 1921 are these counties



AT DES MOINES CONVENTION: A. D. HAYES, NEW LONDON; H. C. BRAND, FORT DODGE; J. L. BURT, WILKE; JOSEPH KOPEL, MARSHALLTOWN; W. M. CHRISTIE AND W. G. GREEN, CHICAGO; RAY MURREL, CEDAR RAPIDS

corn crop from encountering that advantage in the way of an enormously increased demand for corn.

The production of industrial alcohol in America at the present time is between 60,000,000 and 70,000,000 gallons per year. This, if made out of corn, would consume approximately 30,000,000 bushels of corn, or practically the whole visible supply at the moment. It is, not, however, manufactured from corn. It is true some corn is used in the production of alcohol but the total aggregate per annum consumption is probably less than 4,000,000 bushels. The balance of the alcohol is manufactured from molasses, for the most part imported from Cuba.

By the importation of molasses therefore the farmer is deprived of a market for at least 25,000,000 bushels of corn. This is not a large percentage of the whole

which have 15 per cent or more of their acreage in legumes. Only a very few counties show, according to records at Iowa State College, better than 25 per cent of their acreage in legumes, and in those counties you will find less bank failures and less land foreclosures than elsewhere. Kossuth County, for instance, shows only 2.6 per cent of her acreage in legumes, while Clayton County has 26.6 per cent of her land in legumes. Compare the financial situation of the farmers in those counties.

Live stock and dairying has been the salvation of Clayton and many other Iowa counties. Livestock and dairying mean conservation of fertility, and fertility means large yields per acre unit at a lower cost per bushel.

It is one way of creating a marketing program for

May 15, 1926

His dairy products, and pork products would undersell ours in the world market. We export normally around 25 per cent of our pork products. Our Corn Area Committee proposes to turn all that trade to Denmark and the European countries, because they advocate a measure which will enable the competitor of the Iowa farmer to beat him at his own game. Put the proposed agricultural relief bill in effect, and the live stock industry of America is gone.

Men in every community through their efficiency have prospered during the past six years. It is true there have been a large number of farm failures, and no form of assistance, Government or otherwise, will save them at this time.

General business has a record almost parallel to that of agriculture when proportional numbers are compared, and their only salvation has been consolidation. It is possible that consolidation will enable the grain dealer to meet his competition.

Why not give the world an Iowa plan? A plan for grain marketing that will have Federal supervision similar to the national banks, with wide country representation. A Federal reserve grain merchandising system, if you please, and an investment of energy that capitalizes the great natural resources in the heart of the greatest agricultural producing section of the world.

Following Mr. Coverdale's address, Arthur Hunt-



VAL C. MEYER, WELLS, MINN., CENTER, WITH W. R. MADSEN AND E. A. ENGLER, OF MILWAUKEE, WIS.

ington addressed the convention. An increase, not a decrease in freight rates, he said, would cure the transportation and industrial ills of Iowa. "A home market is one of Iowa's greatest needs," Mr. Huntington declared. "That market can come only with industrial growth in our cities and towns—in a word, factories. Factories will not come to Iowa or develop within our borders as long as we have a relatively lower freight rate on raw materials than there is on manufactured products."

Mr. Huntington also suggested that a public relations committee would be a valuable addition to the national organization of grain dealers. The public, he said, is not acquainted with the troubles of grain dealers as public servants, and are not well informed as to the worth of their services.

Before the election of officers was held, Secretary Beale discussed "Handling the Corn Crop". He emphasized the waste there is in letting idle elevators go unused. He spoke of renting an idle plant in one of the towns in which he operates, and of using it profitably as storage for grain that might otherwise have had to be stored at greater expense in some terminal point.

"Get ready to handle a corn crop before it starts to move," Mr. Beale warned. The typical unprotected corn crib and usage of such received criticism at his hands, it being pointed out that the rain and the snow rots the corn. As a satisfactory alternative, he went into detail about his ear corn storage in one of his elevators, including the type of ventilation found to be most satisfactory.

By storing the ear corn over the elevator driveway the corn is not only protected from the severe blasts in winter but the elevator operator can shell the corn whenever it is convenient for him to do so regardless of what the conditions of the roads, the weather, time of day or night, etc., all of which are factors where the corn is cribbed some distance from the elevator. Mr. Beale finds that his handling costs, i. e., the charges for the electricity is less than the income from the cobs alone. Motor trucks as business bringers were also mentioned by the speaker.

The result of the election Tuesday afternoon was:

Clifford C. Belz, Conrad, Iowa, president; O. B. Moorhouse, Glidden, Iowa, vice-president.

Directors for three-year terms: Myron Shipman, Atlantic, Iowa (Dist. 7); John F. Mueller, Calamus, Iowa (Dist. 4); Geo. Moulton, Fondra, Iowa (Dist. 6).

Directors for two-year terms: A. D. Hayes, New London, Iowa (Dist. 9); J. D. Kent, Des Moines, Iowa (Dist. 5); C. A. Davis, Cedar Rapids, Iowa (Dist. 4).

Directors for one year term: I. C. Edmonds, Marcus, Iowa (Dist. 1); Henry Kunz, Wesley, Iowa (Dist. 2); Harry Talbot, Osceola, Iowa (Dist. 7).

THE WELLS MEMORIAL

Joe Schmitz, of Chicago, was appointed to read the following memorial to the late Secretary Wells. At the conclusion, the convention remained stand-

ing, in silent tribute to their good friend, George Wells:

Mr. George A. Wells, secretary of the Western Grain Dealers Association for 25 years, has passed from our midst, and leaves a lasting monument to us in the great work that he accomplished by his close application and faithful attendance to affairs of the Western Grain Dealers Association.

Mr. Wells was born on a farm in St. Croix County, Wisconsin, September 10, 1863, and departed this life October 27th, 1925. He first engaged in the grain business in 1891 at New Richmond, Wis., under the firm name of Wells & Mulrooney. A short time later he became identified with the Northern Grain Company of Chicago, having supervision of their country buyers in Wisconsin, Iowa and Minnesota.

When in March, 1900, Capt. M. T. Russell of Des Moines called 150 dealers to the Iowa capital for the purpose of organizing a state association, Mr. Jay A. King of Nevada was elected president, and under his direction an effort was made to find a satisfactory man for the office of secretary, it being realized that the success of this new enterprise depended largely on the secretary. A conference with Mr. Wells made it apparent that he was especially qualified for the position, and after much persuasion he was induced to accept the secretaryship of the Iowa Grain Dealers Association, later changed to the Western Grain Dealers Association.

Mr. Wells' adaptability for association work was promptly recognized and he was very highly regarded both for his clear understanding of the problems of the grain trade and for his honorable purpose and pleasing personality. Under his administration the membership increased rapidly, and soon was sufficient in numbers to exert a potent influence on all matters connected with the business of buying and selling grain. The Iowa Association attained a high standing among the several such associations.

The results of his work for the betterment of the grain trade concerns so many subjects of such varied character that it would be difficult to summarize them. During the 25 years of service to the Association he was in very close touch with the country grain dealers and through his personal contact with them attained a clear understanding of their problems and by his keen perception was enabled to present new ideas that resulted in the elimination of objectionable practices and the adoption of more desirable methods.

A summary of Mr. Wells' lasting contribution to the Western Grain Dealers Association makes us realize the importance of the work he performed, and the results he accomplished should cause us to pause and consider the possibilities for accomplishment and the power represented by a group of men under a good leader, working in unison in the same line of business towards the adoption of correct business principles.

Adjournment of the Tuesday afternoon session was made at 4:30, but the dealers and their friends were soon united again at the banquet board. Excellent entertainment was provided at the banquet by "Dutch" Schmidt and his dancing, singing, and whistling proteges.

MORNING, APRIL 21

The final session of the Western Grain Dealers Association began at 9:30 A. M., Wednesday. Members Hale and Hayes were active in the discussion of the landlord lien law. It was the former's opinion that the law should be revised if the interest of grain dealers were to be protected. Thus came about the following resolution which was adopted by the convention:

Whereas: Section 10261 of the Code of Iowa provides that a landlord shall have a lien for his rent upon all crops grown upon the leased premises, and upon any other personal property of the tenant which has been used or kept thereon during the term and which is not exempt from execution, and

Whereas: Such established lien without notice to innocent purchasers of such property covered by such



N. S. BEALE, SECOND FROM RIGHT; R. J. McCLEERY, WALTER REYNOLDS, LEE DAVIS, C. H. WORSLEY, IOWA COUNTRY SHIPPERS

lien may cause a financial loss to the innocent purchaser, and

Whereas: In justice to the public it should have notice of such lien; therefore,

Resolved: That we, the Western Grain Dealers Association, favor the enactment of a law which will provide that a Landlord's Lien may be effective but the landlord shall be required to file the lease for record in the county where the property is situated.

We hereby instruct the Legislative Committee of this association to make all possible efforts to have such a law enacted.

The resolution of thanks to the Des Moines hosts was also adopted at this time, as was the resolution "favoring the establishment of industrial alcohol manufacturing plants within the state." The routine business of the convention was speedily wound up. It was voted that the association's policy of subscribing to any certain trade paper for its members would be discontinued. The twenty-sixth annual convention of the Western Grain Dealers Association then adjourned at 11 A. M., April 21.

CONVENTION CALENDAR

May 17.—Panhandle Grain Dealers Association, general meeting, at Amarillo, Texas.

May 18-19.—Oklahoma Grain Dealers Association, Enid, Okla.

May 20-21.—Twenty-ninth annual meeting of the Kansas Grain Dealers Association, Salina, Kan.

May 21-22.—Pacific States Seedsmens Association, annual meeting at Del Monte, Calif.

May 24-25.—Twenty-ninth annual convention of the Texas Grain Dealers Association, Houston, Texas.

May 27-29.—Eighteenth annual convention of American Feed Manufacturers Association, French Lick Springs Hotel, French Lick, Ind.

June 11-12.—Pacific Northwest Grain Dealers Association, at Spokane, Wash.

June.—Midsummer meeting of the Indiana Grain Dealers Association, at Purdue University, West Lafayette, Ind.

June 22.—Retail Feed Dealers of Wisconsin, at Milwaukee, Wis.

June 23-24.—Forty-seventh annual meeting of the Ohio Grain Dealers Association, at Hotel Breakers, Cedar Point, Ohio.

June 24.—Mutual Millers and Feed Dealers Association, at Buffalo, N. Y.

June 24-26.—Southern Seedsmens Association, at Huntsville, Ala.

June 28-29.—Wholesale Grass Dealers Association, at Chicago, Ill.

June 29, 30 and July 1.—Thirty-third annual convention of the National Hay Association, at the Niagara Hotel, Niagara Falls, N. Y.

June 29, 30 and July 1.—American Seed Trade Association, at Chicago, Ill.

August.—Association of Official Seed Analysts of North America, in conjunction with the International Botany Congress, at Cornell University, Ithaca, N. Y.

October 18-20.—Thirtieth annual convention of the Grain Dealers National Association, at the Hotel Statler, Buffalo, N. Y.

October 18.—United States Feed Distributors Association, Hotel Statler, Buffalo, N. Y.

FEED MEN WILL MEET AT FRENCH LICK

A three-day session, commencing May 27, will be held at French Lick, Ind., when the American Feed Manufacturers Association convenes for its eighteenth annual meeting. The headquarters of the meeting will be the French Lick Springs Hotel, and preparations have been going forward under the guidance of Secretary L. F. Brown for a large gathering. Morning business sessions are contemplated, with the afternoons given over to amusement or informal conferences.

Among other features which have been planned for the visitors is a golf tournament, and there will be ample time and adequate facilities for various other outdoor activity.

The meeting will open with the annual address of the president, E. W. Elmore, followed by the report of the chairman of the Executive Committee, W. E. Suits, the report of Secretary L. F. Brown, the report of the treasurer, W. L. Anderson, and that of the traffic manager, R. M. Field. The principal addresses the first day will be one by Professor F. D. Fuller, president of the Association of Feed Control Officials of the United States and one by Professor A. G. Phillips, vice-president of the McMillen Company, Fort Wayne, Ind., who will talk on "From the Outside Looking In".

A luncheon meeting of sales managers, with John B. Edgar presiding, will be held; and the annual dinner will occur at 7 p. m. on Thursday. "The Pursuit of Happiness" will be the subject of an address at this time by Hon. J. Adam Bede, former congressman from Minnesota. On Friday, A. T. Pennington, of the Southern Mixed Feed Manufacturers Association, Memphis, Tenn., will talk, "Know Your Costs!" Dr. R. A. Dutcher, professor of agricultural and biological chemistry, State College, Pennsylvania, will speak on the subject "Some Newer Aspects of the Feeding Problem."

THE forecast of the Indian wheat crop for 1926 is 320,208,000 bushels, which is a decrease of 4,443,000 bushels or 1.4 per cent from last year's crop of 324,651,000 bushels and below the 1919-23 average of 329,571,000 bushels. Since India normally consumes about 330,000,000 bushels, it is likely that there will be little or no wheat exported this year.

WHEAT production in Chile, according to the International Institute of Agriculture, is placed at 27,587,000 bushels, or 3,000,000 bushels more than last year's crop. The crop this year will permit about 5,000,000 bushels to be exported, according to official estimates. The barley crop is estimated at 5,295,000 bushels, compared with 5,094,000 bushels last year; rye 53,000 bushels, compared with 45,000 bushels; oats, 5,188,000 bushels against 4,548,000 bushels; and corn 1,795,000 bushels.

TRANSPORTATION

CANADA GRAIN RATES BELOW STATES'

A statement has been read into the Canadian Parliament record, showing that the average grain haul in western Canada, eastbound to the Head of the Lakes, is 721 miles; westbound to Vancouver, the average is 784 miles. Of last year's crop the Canadian Pacific hauled 5,873,286 tons to the head of the lakes and 733,065 tons to Vancouver. If this traffic had been carried under existing rates on grain in the United States, it would have resulted in \$17,926,323 more in gross revenue being earned by the Canadian Pacific Railroad.

BARGE LINE PROTESTS

A hearing which involved a reduction in railroad grain rates from Kansas City to Port Arthur, Texas, was held in Chicago before I. C. C. Examiner Treazise, the last two days in April. The reduction was opposed by the Warrior Barge Line, and was finally suspended. The reduction was suggested by the Kansas City Southern Railroad. J. F. Holden, vice-president in charge of that railroad's traffic, and an assistant entered testimony tending to show that the rate proposed of 27½ cents, which was a reduction from the present rate of 30½ cents, was necessary to meet the competition of the rate via the barge line of 25 cents on grain and grain products from the origin territory in Kansas and Missouri. There was also testimony to show that the lower rate would enable the farmer to move his grain a much less distance than was necessary if he shipped by way of Chicago and St. Louis terminals.

Theodore Brent, for the barge line, testified that the expense to the shipper of moving his produce by barge line was not so very much less than by railroad, if the extra expenses of elevator charges and insurance were taken into consideration. In addition, he said, the feature of competition between the barge line and the railroad was made less appealing to the shipper's point of view, because of the slowness, all of which, he thought, did not present as dangerous a source of competition, in the barge line, as the witnesses for the carrier described.

CHICAGO CASE OUT OF DOCKET

The case of the Chicago Board of Trade vs. the Chicago, Burlington & Quincy Railroad and other lines has been recommended for dismissal by an Interstate Commerce Commission examiner. Rates on grain from points in northern Illinois, and southern Wisconsin were described as unreasonable and unfair in the petition. Feed rates on shipments of reverse direction were also assailed on the same ground. A joint hearing was had by the Federal commission's examiner and the Illinois Commerce Commission, the latter having before it a complaint attacking similar rates applicable within Illinois.

The burden of the complaint, the examiner said, was that, on grain from the origin territory, local consumers in the Chicago district, were charged relatively higher rates than like consumers at the alleged preferred points. The rates to St. Louis, he said, were the base rates in the adjustment of local rates to those points and it was the St. Louis local rates upon which complainants deeply relied to support their allegation. That declaration was made in respect of rates on grain. As to the rates on feed from Chicago, the examiner said the ones assailed for the most part were local rates and in the circumstances, their reasonableness might not be tested by comparison with proportional rates. He said the fact that local rates on feed were lower than on grain to a few points was not convincing that the same basis should be extended to all points.

RAILROADS CUT FUEL BILL

Nearly \$24,000,000 was saved by Class 1 railroads on their fuel bills during the first nine months of 1925, according to the official figures of the Interstate Commerce Commission. Some railroad officials in the grain states say this saving is not to be taken too seriously, and that that is about the only item not in red ink. Other officials say the good management which produced this saving is bound to result in a better level of dividends.

The total cost of coal and fuel oil for the first nine months of this year was \$241,401,019, as against \$265,771,476 for the first nine months of last year. This saving of \$24,370,457 resulted partly from a decrease in the price of coal, and partly from economies effected by the railroad management. Owing to these economies the railroads moved every 1,000 gross tons of freight one mile during the first nine months of this year on 11 less pounds of fuel than was required in the first nine

months of 1924.

In the Eastern district 422,655 tons of fuel were saved in freight service, and 409,379 tons were saved in passenger service. The railroads of the Eastern district consumed 10 less pounds of fuel in moving every 1,000 gross ton-miles of freight and 0.9 of a pound less in moving a passenger car one mile.

In the Southern district, owing to increased traffic, 278,454 more tons of fuel were consumed in freight service but 41,567 tons were saved in passenger service. Railroads of that district consumed 13 less pounds per 1,000 gross ton-miles of freight, and 1 pound less per passenger train car-mile.

In the Western district 674,525 tons of fuel were saved in freight service and 471,043 tons were saved in passenger service. The railroads of that district consumed 11 less pounds per 1,000 gross ton miles of freight and one-pound less per passenger train car mile.

Besides this saving the railroads as a whole increased the average number of cars per freight train from 41.5 in the first nine months of 1924 to 43.7 in the first nine months of this year and the net tons per train from 709 to 744. In spite of the heavier and longer trains the freight traffic of the country moved 0.3 of a mile per hour faster this year than last.

In passenger service the saving of fuel was effected despite an increase in passenger train car-miles of 46,864,000 over the total of the first nine months of 1924.

WOULD DISMISS SOUTH DAKOTA CASE

A report submitted by Examiner Fleming to the Interstate Commerce Commission recommends dismissal of a complaint filed by the Aberdeen Commercial Club, of Aberdeen, S. D., against existing rates on coarse grain from Aberdeen and contiguous territory to points in Oregon, Washington, Idaho and Montana. The Oldham Farmers' Elevator Company of Oldham, S. D., and the Tillamook Creamery association of Tillamook, Ore., were joined with the Aberdeen club as complainants, but the Tillamook organization was not represented at the hearing and its interest was not clearly explained, according to the examiner's report.

GRAIN TRADE PATENTS

Bearing date of January 19, 1926

Grain huller.—James J. Ross, Portland, Ore., assignor to The J. J. Ross Mill Furnishing Company, Portland, Ore., a corporation of Oregon. Filed March 15, 1923. No. 1,570,081.

Grain elevator attachment.—Hector H. Parliament, Henry, S. D. Filed September 11, 1925. No. 1,570,521.

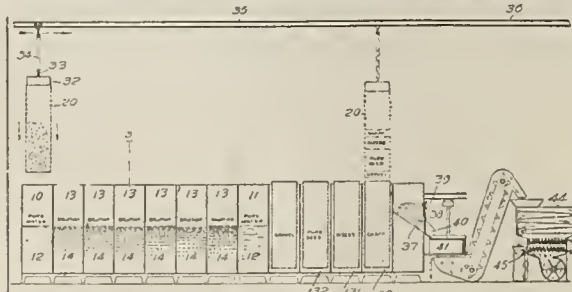
Bearing date of February 2, 1926

Grain car door latch.—Peter M. Bozich, Spokane, Wash. Filed July 17, 1923. No. 1,571,444.

Bearing date of February 9, 1926

Method and apparatus for cleaning, separating and grading seeds and other bodies.—Harry R. Warren, Wabuska, Nev., assignor to Warren Seed Cleaning Company, Reno, Nev., a corporation of Nevada. Filed May 27, 1921. Renewed May 14, 1925. No. 1,572,055. See cut.

Claim: The method of separating mixed bodies of different specific gravity which consists in enveloping the mixture in succession in liquids of graduated density



and from time to time removing the layers from one another that are produced by the action of the liquids.

Bearing date of February 16, 1926

Grain treating machine.—Samuel A. Weitman, Kahlotus, Wash. Filed April 23, 1923. No. 1,573,340.

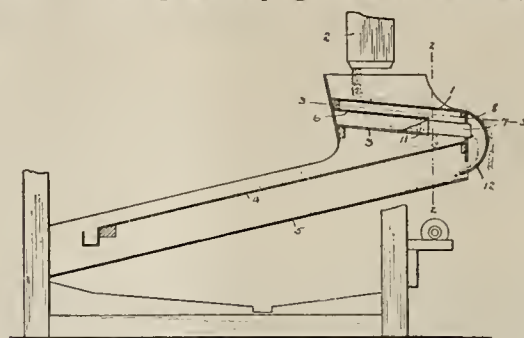
Machine for treating seed grain.—Claude C. Calkins, Spokane, Wash. Filed June 28, 1923. No. 1,573,142.

Dust collector.—Ralph H. Bourne and Aubrey J. Grindle, Chicago, Ill., assignors to Grindle Fuel Equipment Company, Harvey, Ill., a corporation of Illinois. Filed November 22, 1924. No. 1,573,135.

Grain separator.—Thomas C. Hutchinson, Du-

luth, Minn. Filed July 17, 1925. No. 1,573,166. See cut.

Claim: The combination with a separator of the type described including a scalping sieve and successively

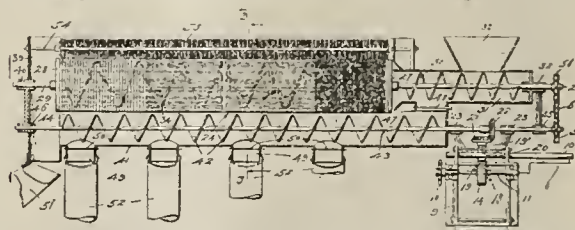


therebeneath a blank, a wheat sieve, and a fine seed sieve and the blank for performing an initial separation of the wheat from the oats.

Bearing date of March 2, 1926

Combined grain gross conveyor and dockage remover.—Anson S. Barker, Minneapolis, Minn. Filed December 31, 1924. No. 1,574,751. See cut.

Claim: A combined conveyor and dockage removed comprising a screen, sectional conveying means for delivering grain to the screen and for receiving the dockage



from the screen, and a gate operative, at will, to cause one section of the conveying means to by-pass the grain in the direction of the screen.

Bearing date of March 9, 1926

Grain elevating conveyor.—Carl L. Rhoten, Arriba, Colo. Filed September 8, 1925. No. 1,575,937.

Bearing date of March 23, 1926

Grain door.—Theophilus Vincent Stralka, Colgate, N. D. Filed February 7, 1925. No. 1,577,547.

Bearing date of March 30, 1926

Grain door for freight cars.—Joseph A. Schmitz, Chicago, and Adyn E. Schuyler, Evanston, Ill. Filed April 19, 1924. No. 1,578,686.

Bearing date of April 6, 1926

Weighing scale.—Halvor O. Hem, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey. Filed December 16, 1922. No. 1,579,609.

Car weighing scale.—John D. Pugh, Mount Washington, Md. Filed July 18, 1921. No. 1,579,658.

Bearing date of April 13, 1926

Grain blending and distributing apparatus.—Richard C. Stone, St. Louis, Mo. Filed January 25, 1923. No. 1,580,176.

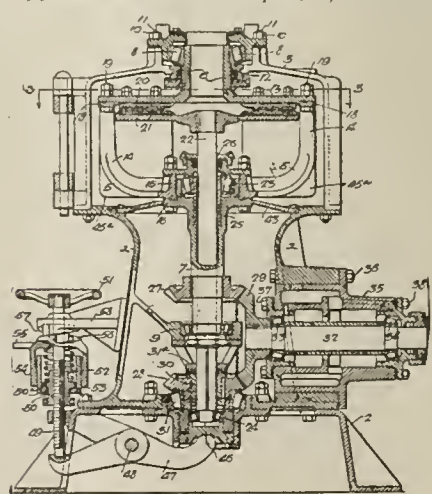
Claim: The combination of a plurality of adjustable grain-sprouts, a distributing receptacle through which the grain is delivered to said adjustable spouts, said receptacle having inlets for grain from different sources, and means supported by and located at the discharge end of said distributing receptacle whereby the grain passing into any of said inlets may be selectively directed into any of said spouts.

Method and means for separating dust from air.—John B. Dyer, Ferguson, Mo. Filed November 25, 1922. No. 1,580,473.

Bearing Date of April 20, 1926

Attrition mill.—Albert A. Longaker, Chambersburg, Pa., assignor to The Wolf Company, Chambersburg, Pa., a corporation of Pennsylvania. Filed April 15, 1925. No. 1,581,969. See cut.

Claim: An attrition mill comprising in combination, two opposed attrition plates, a rotatable spider carrying one of the plates and having two hollow axial trunnions on opposite sides of the plates, one of the trunnions serving for the supply of raw material to the plates, bearings for the trunnions, a supporting member for the other plate extending through the other trunnion, and means engaging the last said trunnion for rotating the spider separately from the supporting member.



FIELD SEEDS

MUST STAIN IMPORTED RED CLOVER AFTER MAY 26

President Coolidge's signature was affixed to the Gooding-Ketcham bill on April 26, thus causing the provisions of the new law to become effective in about a week, on May 26 to be exact. This law requires all imported Red Clover and Alfalfa seed to be colored in order to identify its origin. Only a small percentage of the seed in each bag has to be stained. The character of the whole lot is then readily distinguishable.

All Red Clover and Alfalfa seed that is unadapted for seeding in the United States will be stained red. All other imported Red Clover and Alfalfa seed will be stained other colors, each country being assigned a certain color to identify the seed from that country. Seed of these varieties from Canada also comes under the provisions of the law. The administration of the law will be under the United States Department of Agriculture.

RETAIL PRICES LOWER

In reply to a questionnaire sent out by the United States Department of Agriculture, more than 2,000 retail seed dealers made reports indicating that retail prices in general, were lower on May 1 than either last month or on a corresponding date last year. Compared with a month ago, prices ranged five cents—\$1.30 per 100 pounds higher for Red Clover, Alfalfa, Orchard Grass, Siberian Millet, Orange Sorgo Rape, Hairy Vetch, cowpeas, soybeans, and seed corn. The remainder of the list was lower with the exception of seed oats and barley, which remained unchanged. The few kinds of seed which were higher than a year ago were Alsike, Timothy, Redtop, Kentucky Bluegrass, Orchard Grass and Hairy Vetch.

INVENTS HIP POCKET TESTER

A South Dakota banker reports that as far as he is concerned, seed testing can be well taken care of by a home-made device, easily assembled, and as easily transported from place to place as a vest-pocket camera. A little tin box carried in his hip pocket is the seed corn tester depended upon by him to find out if corn in which he is interested carries the necessary germinative characteristics. He takes a flat tin tobacco box, places a pad of cotton batting in it, and, after moistening the pad, places the kernels from several ears on the cotton pad and stows it in his hip pocket.

A few days tells him whether the corn will germinate, and, as he starts his testing along in the winter months, by spring he has obtained the tests from many ears of corn. This is the easiest, most convenient and least expensive of any of the methods of testing which has ever been developed in his section, he declares. He says that the cooling when his trousers are not being worn at night does not appear to hurt the test.

SEED DEMAND GOOD

By C. O. SKINROOD

Milwaukee seed dealers report that the seed demand for the past season was of pretty good volume. Early in the spring the demand for seeds was disappointing and many dealers reported extremely light buying. But later on the demand appeared stronger.

The demand for Sweet Clover was perhaps the most striking point in the seed trade of this spring. The chief reason for this was apparently its cheapness. The other is the sentiment which has been worked up in favor of this crop by the Wisconsin college of agriculture and by the many county agents.

There also was the remarkable call for Alsike. The price of Alsike seemed to be more attractive than that of Red Clover. Some dealers say there is much disposition now to experiment around and try new things in seed buying and this was undoubtedly a big factor in the increased buying of this seed.

The Red Clover demand for the season was reported fair to average. Dealers say that Red Clover buying comes and goes.

The call for Alfalfa this year among the Milwaukee seed trade was excellent. The demand is based largely on the growing popularity of this brand of hay and forage and to the fact that the price is comparatively reasonable.

The demand for Timothy seed this year was very disappointing. The farmers of Wisconsin and other states of the Northwest are getting more and more away from this seed.

The Milwaukee seed trade is just now busier sup-

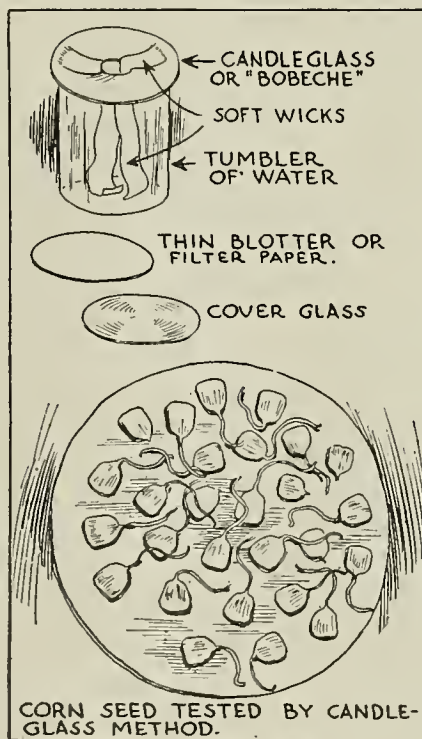
plying seed corn and the late grasses than in any other line. The dealers here report seed corn is selling all the way from \$2.50 to \$6, the former price being for the western corn coming from Nebraska and the Dakotas and the higher priced corn being the Wisconsin, home grown, fire dried seed.

Dealers report that germination is still the big problem in buying seed corn, some lots having high germinating qualities and others equally good looking lots having very low germination tests. Indications are that there will be plenty of seed corn for all demands.

GRAIN TRADE INSURANCE

It has been suggested that careful germination tests, when universally accepted, will be recognized as harvest insurance to growers and grain trade insurance for elevator owners. Seed corn in many sections was in bad shape last fall and there is greater need than usual to test all seed corn for germination. It will be necessary to replenish stocks to some extent over wide stretches of farm territory and in getting a new supply only tested should be bought. The warning to test seed corn has been almost universal.

The extremes of moisture after the corn reached a good maturity with the thawing and freezing after the grain was water-soaked is to blame for the trouble. Much matured corn spoiled because of the unusually wet fall after an early hard freeze.



In early fall when the corn matured any ear well filled out and responding to the tests for a good seed ear would have made good seed if picked and put under shelter.

Germination tests, either conducted at the elevator, or by a seed house or experiment station, are the only way to be on the safe side. The candle glass or bobèche test, the old rag doll, or any similar device to see if the corn will grow, should be used. The quickest way is to split a kernel selected from the center of the cob lengthwise with a jackknife, revealing the germ. If the germ seems plump and solid it is probably sound. If it is dark, discolored or wet in appearance, the ear should be discarded as seed corn.

All seed corn sold by first-class elevators and seed houses, is tested for germination before it is put on the market so that this supply can be depended upon to germinate freely. Tests of much of the home-saved seed of last fall will show that it will not grow at all, so it is now time to look around if tests of the home supply show it is valueless, to locate a supply of corn of good viability. Seed corn which has been given a reliable test by responsible people is the only kind that should be purchased.

GRAND JURY HEARS SEED CASE

What probably will be the final step in checking the fraudulent sale of meadow fescue and buffalo grass as a new "wonder grass" was taken last week with the indictment by a Federal grand jury of Allen W. Miller, operator of the Zenith Lawn Accessory Company. Miller was charged with us-

ing the mails to defraud in the sale of "Herba Prati", a grass that it was asserted would choke out weeds and reach its full growth in 30 days.

Only one pound of the seed of this grass was required for about 400 square feet of lawn, the advertisements stated. The jury found that the seed was that of ordinary meadow fescue and also buffalo grass, which Miller obtained at a low price and sold for \$1.50 a pound.

The post office department previously had issued a fraud order depriving the use of the mails to the Zenith Lawn Accessory Company. At that time it was disclosed that Miller, operating under that name, had worked the scheme in many parts of the United States. He was said to travel by motor caravan distributing supplies and also to have offices at Kansas City and other places in charge of a stenographer, who sent out the alluring literature and handled the orders until suspicion made it advisable to move.—Seed Trade News.

NEW YORK SEED SEASON ENDS

By C. K. TRAFTON

Irregularity marked the last month of the big order season in the New York market for the leading field and grass seeds. At the end the larger distributors generally expressed themselves as well satisfied with the total turn-over for the month as well as for the season. Much of the time, and especially at the outset, climatic conditions were abnormal, the chief drawback being unseasonably low temperatures. The bad conditions early in the month were especially marked in the interior where frequent rains and snows seriously delayed farm work. Large dealers generally maintained a firm and cheerful attitude, taking advantage of the occasional periods of quietude to catch up with their old orders, and being satisfied that the change for the better in climatic conditions which was bound to come would be accompanied by a marked improvement in demand so that they would be able to make up for lost time as far as selling was concerned. Toward the end of April and early in May these hopes were realized; the "soft" spots in the market disappeared; and they were able to close out the season with a renewed flurry of activity at firm prices.

Red Clover was less active early in the month, feeling the effects of the gradual closing-up of the southern season. In fact, total arrivals for the month were only 2,265 bags, compared with about 7,700 for the period preceding. Later the loss of southern markets was made up by a more active demand from nearer home, and while holders of domestic seed made no effort to advance above the 35 cent level, the appreciable depletion of imported stocks enabled them to establish the basis at 25 cents. A small lot of Chilean Clover of choice quality arriving unsold was quickly taken at 21 cents in bond.

Crimson Clover was quiet most of the time, but toward the end began to develop signs of interest. Although it was too early for a positive opinion on the crop, some French shippers were inclined to "feel out" the market.

Timothy was in less active demand from both foreign and domestic buyers early in the month, and hence it was possible to buy in some quarters at 8 cents, although other holders still quoted 8½@8½ cents. Later, while foreign buying fell off, domestic demand improved and it was no longer possible to buy at even money. Exports for the month were 1,715 bags, mostly to Germany, against 1915 in March.

Redtop was less in demand early in the month, from both domestic and foreign buyers and sellers who had previously asked 36 cents, reduced their basis, the general quotation being 32@34 cents. Later the 32@36 cents basis was re-established as domestic buying became more spirited. Exports during the month were only 140 bags, against 2,320 in March.

Alsike buying was slow on both foreign and domestic account early in the month and in some quarters the price was shaded to 27 cents, although 28 cents was still quoted elsewhere. Later domestic buyers took hold much more freely and the market firmed up to 27½@28 cents. Arrivals were 21 bags from Germany.

White Clover was in good demand practically throughout the month and with stocks meager and foreign markets strong the 35@38 cent basis was firmly sustained. Owing to the growing scarcity of spot seed buyers showed more interest in foreign offers. As a consequence sales were reported early in the month of good color seed at 23 cents c. i. f. for 97 per cent and 24½ cents for 98 per cent seed. Buyers continued willing to pay those prices, but

shippers offered only sparingly at 27@28 cents, claiming that stocks were greatly reduced. Arrivals were only 370 bags, against 615 during March.

Alfalfa was dull early in the month with domestic quoted nominally at 19½@20 cents in 100 pound lots. Later demand became more active, especially for Canadian which sold at 22½ cents duty-paid, while domestic advanced to 20@21 cents. Buyers showed more interest in Argentine seed for forward shipment but as domestic was available in a large first-hand way at 17½@18 cents they were not willing to pay over 12½@13 cents c. i. f.

RECOMMENDS OLD BEAN SEED

The use of bean seed two and three years old has been recommended by Colorado seed experts as one of the most promising means of controlling bacterial bean blight. Before planting old seed, a germination test is of course necessary. Should the viability be found low, more seed should be purchased, and a proportionately larger seeding be made to give the desired stand.

Tests at the Colorado Seed Laboratory have shown 93 per cent germination for one and two-year old seed. Three-year old seed registered 71 per cent, four-year old seed 75 per cent and six-year old seed 71 per cent. The proper maturing of the seed and the conditions under which it has been stored have much to do with the germination and longevity. Well ripened stock kept in a dry place retains its viability remarkably well.

WHEN WHEAT RUNS OUT

The "running out" of wheat, not an uncommon complaint among growers, in which it is suspected that the wheat itself has deteriorated, is merely the result of not planting properly cleaned and tested seeds. The usual remedy is to change seeds and, under the circumstances, it is the right one. Seed wheat sold by reputable elevators and seed plants is, of course, thoroughly cleaned of weed seed and impurities, tested of weed seed and impurities, and tested for germination.

The Kansas State Agricultural college in one of its bulletins explains the "running out" of wheat and suggests clean seed as the remedy. The Kansas station says:

"One of the most commonly suggested ways of increasing the yield of wheat is to change seed. If the grain is shrunken, smutty, affected with yellow berry, or if the yield is poor, many farmers believe that the seed is 'running out.' This is, without a doubt, a mistaken idea. There is no evidence to show that wheat runs out, or that a change of seed increases the yield, while, on the other hand, numerous instances are known where farmers have grown the same variety for 20 or 30 years without ill effects."

COMMENDS ELEVATOR SEED

Since seed without life is without value, the price per bushel can be judged as low or high only after the analysis of purity and the percentage of germination is known. This was the burden of R. D. Edward's speech when he spoke over the radio on behalf of the Wholesale Grass Dealers Association. He said that, generally speaking, seedsmen recognize three classes of seed. (1) Raw or "country run" seed as it comes from the thresher or huller. This "country run" seed, even from the best and cleanest of fields, will contain a heavy proportion of chaff, dirt and other inert matter, weed seeds and the seeds of other crops.

(2). Country-Cleaned Seed. This is the seed after it has been given a more or less careful cleaning with the type of machinery available on the farm or in the country elevator. If this cleaning is made carefully the resulting seed may be of fair to good quality, containing a comparatively small percentage of weed seeds, inert matter, etc.

(3). Recleaned Seed. This is clean seed which has been brought to one of the big cleaning and refining establishments and there run through batteries of delicately adjusted and highly specialized machinery which remove, in so far as it is humanly possible, everything but the pure true seed.

DECISION FOR TEXAS FIRM IN SEED SELLING DISPUTE

Around Christmas time in 1924, a Kansas City, Mo., house sold a Fort Worth, Texas, grain firm 120,000 pounds of Red Top and Black Amber cane seed. All of which led to a 16-month controversy which has just been settled by the Grain Dealers Arbitration Committee No. 4.

The evidence in the case showed that the defendant failed to comply with terms of contract and did not ship the two cars. Wires and letters from the plaintiff urging shipment are in evidence. On January 24, 1925, Smith Bros. Grain Company, Fort Worth, Texas, wrote advising shipments were past due, and asked for something definite by wire. Again on January 30 they urged shipment and advised the G. Clinton Adams Grain Company of Kansas City, Mo., that if they could not ship, that the plaintiff would buy for their account. On Feb-

ruary 3, the G. Clinton Adams Grain Company wired Smith Bros. Grain Company in answer to a letter dated January 30, advising that they would ship within 10 days from February 3, and claimed the letter of January 30 from Smith Bros. Grain Company was an extension of contract, and gave them 10 days from February 3 in which to ship.

The arbitrators did not agree with the position taken by the G. Clinton Adams Grain Company that the letter in question was an extension to February 13. It was a demand, they said, for some definite statement concerning shipment, and further stated the contract was effective at seller's risk and must be terminated soon. They found for the plaintiff in the sum of \$162.

NEW INDIANA SEED COMMISSIONER

Dr. Henry R. Kraybill will succeed the late E. G. Proulx as Indiana State Chemist and Seed Commissioner. He has been bio-chemist at the Boyce-Thompson Institute for Plant Research at Yonkers, N. Y.

Otis S. Roberts has been acting in this capacity at Purdue, since Dr. Proulx's death. Dr. Kraybill will assume his new duties in June or July. Mr. Roberts will resume his former duties as chief inspector of the department.

IMPORTS OF FORAGE SEEDS

The Seed Testing Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds permitted entry into the United States under the Seed Importation Act:

Kind of seed—	April 1-15, 1926	July 1, 1925, to April 15, 1926
Alfalfa	(1) 399,900	3,930,100
Canada bluegrass	10,000	230,600
Alsike clover	793,200	10,351,300
Crimson clover	32,700	5,219,600
Red clover	(2) 532,900	19,051,200
White clover	68,500	1,481,200
Clover mixtures	2,600	117,300
Meadow fescue	300	13,300
Agrostis mixtures .....	.....	15,700
Grass mixtures .....	.....	100
Broom-corn millet .....	.....	222,200
Foxtail millet .....	.....	125,400
Orchard grass	500	93,400
Rape	(3) 218,400	5,924,200
Awless bromegrass .....	.....	11,000
English ryegrass	34,600	2,148,300
Italian ryegrass .....	.....	1,561,700
Hairy vetch	(4) 218,000	3,204,300
Spring vetch	68,200	1,124,300

The Seed Testing Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds not subject to the Seed Importation Act:

Kind of seed—	April 1-15, 1926	July 1, 1925, to April 15, 1926
Lawngrass mixture .....	.....	17,100
Hairgrass .....	.....	2,200
Bentgrass	8,300	317,600
Biennial white-flowered sweet clover	184,000	4,153,200
Biennial yellow flowered sweet clover	223,900	446,700
Bur clover .....	.....	709,900
Crested dog's tail	4,500	38,600
Chewings fescue .....	.....	468,500
Other fescues	5,600	1,040,300
Meadow foxtail .....	.....	300
Fescue grass .....	.....	3,100
Rhodes grass .....	.....	16,500
Rough-stalked meadow grass	500	67,500
Sainfoin .....	.....	900
Sweet vernal grass .....	.....	1,900
Serradella .....	.....	300
Tall oat grass .....	.....	400
Carpet grass .....	.....	5,700
Velvet grass .....	.....	8,200
Wood meadow grass .....	.....	39,200
Yarrow	100	100
Molasses grass .....	.....	80,500

(1) All from Canada. (2) 402,600 pounds from France, 97,800 pounds from Canada, 11,000 pounds from Holland, 21,500 pounds from Luxembourg. (3) 144,100 pounds from Holland, 30,100 pounds from Japan, 22,000 pounds from France, 22,000 pounds from Germany, 200 pounds from England. (4) 182,900 pounds from Germany, 21,900 pounds from Latvia, 6,600 pounds from Sweden, 6,600 pounds from Canada.

INOCULATION OF LEGUMES

By W. G. A.

Plants of the bean family have the singular power of taking nitrogen from the air and secreting it in little bumps on the roots known to botanists as nodules. This trait is due to the presence of bacteria which live on the roots of these plants and thrive there only. They are known as symbiotic bacteria because of this relationship. Other plants have these symbiotic bacteria which perform some function in nourishing and reproducing the plant.

The members of the bean family grown as farm or garden crops are known as legumes. The Clovers, Alfalfas and various beans are all legumes. Close inspection of the individual tiny bloom in a Clover head will show the butterfly shape which is characteristic of the family.

Science has learned to assist the plant in its pursuit of nitrogen from the air by furnishing it with a supply of the bacteria which do the work. Sometimes the legume does not find these bacteria in the soil as in the case of soy beans so the nodules are not formed as they are on Clover which usually finds them plentifully.

Seedsmen now assist the farmer in producing

luxuriant growth of legume crops by providing him cultures of these bacteria to inoculate the seed, which is done by soaking the seed or sprinkling it with the liquid containing the culture. The soil is also inoculated to liberate these bacteria in some cases. The general name of this bacterium is *Bacillus radicicola* but the family has its likes and dislikes and various brothers and sisters of the tribe can inoculate plants to their liking.

These bacteria are raised in cultures of gelatin, agar liquid and peat. The life of these cultures is limited and the reputable seed houses keep close watch to see that when the cultures grow too old to be useful that they are destroyed. They also make it a point to see that when a culture is sold, the right one for the crop desired is sold.

They have co-operated in the passage of state laws to regulate the handling of these inoculants so that the farmer may not become the victim of unscrupulous dealers.

There are six general groups into which the legumes are divided, each group taking a particular type of culture to inoculate it and start it on its way busily acquiring nitrogen nodules and develop luxuriant growth in the plant. Following are the groups, the members of each group being inoculated by the same specific organism which is procurable for the purpose from reputable seed houses.

1. Red Clover, Alsike Clover, Crimson Clover, White Clover, Berseem Clover, Mammoth Clover, Sappling Clover.

2. Alfalfa, Bur Clover, Yellow Sweet Clover, White Sweet Clover, Fenugreek.

3. The soy beans.

4. Garden beans, field beans, scarlet runner beans.

5. Cowpeas, partridge peas, velvet beans, peanuts, acacia, lima beans.

6. Vetch, garden peas, Canada field peas, sweet peas, broad beans, lentils. Inoculating these crops is to be recommended. It is absolutely necessary, experiment stations find, in the case of soy beans, planted where they never before have been grown and they take a specific culture. It is a simple matter to write a seed house the crop it is desired to inoculate and the proper culture for the purpose will be furnished.

HEARING ON NEW YORK SEED LABELING BILL

By C. K. T.

Marshall H. Duryea of the Nungesser-Dickinson Seed Company of Hoboken, N. J., and New York City, took a trip to Albany about the middle of February in order to attend the hearing on Assembly Bill No. 145, known as the Graves Bill for Amending Foreign and Market Laws Relating to the Labeling of Agricultural Seeds. Spokesmen for this delegation expressed the unanimous opposition to the bill among the trade and pointed out its unworkable requirements, especially that calling for the statement of the origin of all seeds. They also mentioned that a Federal bill is now pending in Washington and volunteered to co-operate with the state legislature in the matter of framing a state bill as soon as the Federal bill was put through.

16 WHYS OF SOY BEAN POPULARITY

The Badger State knows 16 good reasons for producing soy beans, and tells them in a bulletin issued by the Wisconsin University Experiment Station. Increases in soy bean seed sales have resulted naturally from the broadcasting of these facts to the farmers:

They are adapted to nearly all soils and regions of the state but grow best on fertile, sweet soils.

This crop is especially valuable on soils too poor or too low in lime to grow other legumes.

They fit into regular system of rotation.

They require no special machinery, ordinary farm implements can be used.

The work on soy beans comes at a time when other crops do not need immediate attention.

They are an annual crop so there is no loss from winter-killing.

This crop is not subject to any bad diseases or insect pests.

Soy beans are more frost resistant than corn.

They stand hot weather especially well.

They yield large amounts of high protein forage, rich in feeding value.

They furnish good, cheap, home-grown concentrates to balance rations.

They leave the soil in excellent condition for the following crop of small grain.

There is an increased yield of other crops following soy beans due to the fertility left in the soil.

They are an emergency crop when Clover fails, or other crops are washed out, destroyed by hail, or eaten by cutworms.

Soy beans are used for so many purposes that they can be diverted from one use to another if necessary.

There is a good cash market for surplus soy bean seed or hay.

The success of the soy bean seems to depend upon selecting the proper variety to suit the soil conditions as well as climate and altitude. Different types of soy beans are grown for various purposes, some being superior for hay, while others are better for seed, silage, or hogging off. The farmer desiring seed is dependent either upon the advice of reputable seedhouses who have experimented

(Continued on page 711)



OHIO AND MICHIGAN

C. H. Glasgow is manager of the Co-operative Elevator at Nashville, Mich.

McCook & Ankerman succeed McKee & Ankerman in the grain business at Clark, Ohio.

The elevator of the McComb Farmers Co-operative Company at McComb, Ohio, is being repaired.

Phillip Shepard succeeds Robert Hagan as manager of the Farmers Co-operative Elevator at Owosso, Mich.

The Gee Bros. are to build a new elevator at Bailey, Mich. It will be built on the site of the one which burned.

The Albert Todd Company, owners of the elevator at Corunna, Mich., is moving its offices from Owosso to Corunna.

The F. H. Hasley Elevator at Milan, Mich., has been bought by Fulcher & Lee. Mr. Fulcher will be in charge for the president.

The elevator at Ridgeway, Ohio, formerly owned by George J. Ulrich has been bought by C. R. Einsel, who will operate as C. R. Einsel & Son.

F. T. McCurdy and Nellie McCurdy have bought the Burt & Bidlack Elevator at Oakwood, Ohio, which will be conducted as the Oakwood Elevator.

The elevator of the Blose Bros. at Urbana, Ohio, has been bought by the Big Four Railroad which will wreck the structure to make room for a new building.

The elevator and store building at Lockville (p. o. Carroll), Ohio, has been bought by B. E. Schirm & Co. They will handle all kinds of grain, hay and feed.

The Robinson Grain Company has been incorporated at Lima, Ohio. The incorporators are: O. C. Robinson, May Shane, Helen Robinson Reese, G. Robinson and Olive Bogart.

INDIANA

The Lyons, Ind., elevator of J. L. Morgan is being remodeled.

Improvements are being made to the elevator of Peter Umfried at Stevenson (p. o. Newburg), Ind.

The Gessie Grain Company, Gessie, Ind., is to rebuild its elevator which burned. The contract has been let.

The elevator of the Mexico Grain & Livestock Company at Mexico, Ind., which burned, is to be rebuilt.

A new warehouse has been built at South Wana-tah, Ind., for the Farmers Elevator Company. Mr. Baske has been manager there.

Improvements are to be made to the elevator and equipment of the Farmers Grain & Coal Company at Frankton, Ind., this season.

The business at Burket, Ind., formerly operated by the Burket Equity Union has been bought by the Burket Elevator Company.

The Cleveland Grain & Milling Company is going to rebuild its elevator at Beech Grove, Indianapolis, Ind., which burned a short time ago.

The elevator of the Emporia Elevator Company at Emporia (Markleville p. o.), Ind., has been bought by the Markleville Grain Company.

The J. C. Phillips Elevator at Star City, Ind., is being improved by the addition of some new machinery including a cracking and grading machine.

The Centerton Grain & Seed Company has been incorporated at Centerton, Ind., capitalized at \$15,000. The directors are: C. H. Hackleman, Bert Finch and Lorena Finch.

New equipment including sheller, cleaner, combined corn cracker and grader and new transmission machinery has been installed in the elevator of the Penman Bros. at Brazil, Ind.

J. F. Postlewaite is manager of the Farmers Elevator Company at Francesville, Ind., succeeding John Zinc, former manager, who was forced to retire because of ill health.

The elevator of the Kirkpatrick Grain Company at Shirley, Ind., has been bought by W. S. Ham and T. H. New of Greenfield. They are operating it under the firm name of the Shirley Grain & Fuel Company.

The Farmers Elevator Company of Mount Vernon, Ind., sells coal. It is enlarging its coal plant

by the addition of two monolithic concrete coal pockets, 20 feet in diameter by 55 feet high, which are being built by the Polk Genung Polk Company of Fort Branch, Ind. Godfrey coal handling machinery will serve the old stave type pocket and the new ones. Work is well under way.

The Rohm Bros. were incorporated at Rockville, Ind. They have been operating a mill and grain business there for over 30 years. George W. Rohm, Mrs. E. H. Calvin and J. R. Johns are the stockholders. George W. Rohm is president and general manager; J. D. Swain, vice-president; Charles O. Seybold, secretary and treasurer. The company has property at Rockville, Mecca, and Mansfield.

EASTERN

The East Boothbay, Maine, branch of the New-castle Grain & Lumber Company has been bought by J. W. Winant.

Daniel Rider's warehouse at Baltimore, Md., was sold at public auction for \$11,000. He was a grain and feed merchant.

The sheds, warehouses and plant of Stowe & Olmstead, grain, feed and flour dealers of East Hartford, Conn., which burned is to be rebuilt.

The name of Robert A. Smith at Albany, N. Y., has been changed to the Fred B. Smith Company. Robert A. Smith has not been active since 1924.

The wholesale and retail grain business of Edgar Fowles at Randolph (Gardiner p. o.), Maine, has been bought by Henry McCobb and Joseph McNamara.

The grain and feed business of Patton, Irwin & White at Burlington, Vt., has been bought by the A. D. Pease Grain Company. Wesley T. Abell will be manager.

The Wheeler Grain Elevator at Buffalo, N. Y., has been bought by the Transit Forwarding Company. It has a capacity of 750,000 bushels and is of modern construction.

The Borden Grain Company has been incorporated at Taunton, Mass., to conduct a grain, feed, flour business, capitalized at \$20,000. F. H. Hall is president; H. B. Borden, treasurer.

A two-story warehouse is to be built at Lewistown, Maine, for the J. B. Ham Company which will probably be used for feed storage. The company operates a 50,000-bushel elevator at Lewistown and has 30 branch stores in central and western Maine.

The Hallet & Carey Elevator Company has been incorporated under the laws of Delaware, with T. L. Croteau of Wilmington its representative there. The company is incorporated to own and operate grain elevators, and mills, and engage in the grain storage business. Its capital stock is \$500,000.

IOWA

Harry Petzer is manager of the Farmers Elevator Company at Ellsworth, Iowa.

Tom Lyons succeeds J. A. Beckwith as manager of the Farmers Elevator Company at Gowrie, Iowa.

The J. F. Gamerdinger Elevator at Remsen, Iowa, has been bought by the Farmers Co-operative Company.

Bert Sniffin is manager of the elevator of the Farmers Elevator & Supply Company at Kamrar, Iowa.

Capitalized at \$75,000, the Gladbrook Grain & Lumber Company has been incorporated at Gladbrook, Iowa.

A 20,000-bushel addition is to be built to the elevator of the McMaster Elevator Company at Hornick, Iowa.

The store building and stock of the Garvin Farmers Elevator at Garvin, Iowa, has been sold to the Lamb Bros.

The articles of incorporation of the Farmers Elevator Company at Piper (Rockwell City), Iowa, have been renewed.

Capitalized at \$10,000, the Farmers Co-operative Grain Company has been incorporated at Fairfax, Iowa. Frank Bellon is president; J. J. Buresh, vice-president; James Wilson, secretary-treasurer.

The D. Sherman Grain Company of Omaha has leased the idle plant of the Iowa Corn Products Company at Des Moines, Iowa. E. E. Delp will be

manager. The lease provides that the Sherman company may buy the elevator, which has a capacity of 125,000 bushels, within a specified time.

The Farmers Elevator Company of Ocheyedan, Iowa, is making plans for reorganizing. Its old charter has expired.

A 10,000-bushel elevator is to be built at Modale, Iowa, for the Modale Elevator Company, replacing the one which burned in February.

The Farmers Elevator Company of Norway, Iowa, whose charter expired the latter part of April, has been reorganized and charter renewed.

A new elevator is being built at Pioneer, Iowa, on the former C. W. Edgington site by Davis Bros. & Van Potter. It is of the very latest design.

The Blencoe Farmers Elevator Company at Blencoe, Iowa, is to build a modern office building of hollow tile. Charles Barnes is manager.

The charter of the Farmers Elevator Company at Boxholm, Iowa, has been renewed. Frank E. Carlson is president; J. E. Reutter, secretary.

Repairs and improvements are being made by the Farmers Elevator & Exchange of Wapello, Iowa, and a new smokestack is being built.

Plans have been made by the Trans-Mississippi Grain Company of Council Bluffs, Iowa, for the erection of a \$15,000 dryer and bleacher plant.

The Farmers Elevator at Cooper, Iowa, has been bought by the D. Milligan Company at a sheriff's sale. The elevator has a capacity of 40,000 bushels.

The elevator and coal business of the Nye-Schneider-Jenks Company at Blencoe, Iowa, has been bought by the Blencoe Farmers Elevator Company.

The Cannon & Tjossem Elevator at Laurens, Iowa, has been taken over by Dr. J. J. and R. C. Booth of Marion. R. C. Booth expects to have charge of the elevator.

The elevator, flour mill and business of George Kent, owner of the Adel Mill & Elevator Company, Adel, Iowa, has been bought by G. A. Kent of Indianola. Mr. Kent and his associates expect to build a large warehouse and then reopen the elevator for the buying and storing of grain.

MINNESOTA AND WISCONSIN

T. P. Smidesang is manager of the Farmers Elevator & Trading Company at Eldred, Minn.

A Fairbanks-Morse Scale has been installed by the Farmers Elevator Company of Faribault, Minn.

The elevator of the Speltz Grain & Coal Company at Hope, Minn., which burned, is to be rebuilt.

Extensive repairs and improvements have been made to the elevator of Hanson & Walstad at Wheaton, Minn.

C. A. Berg succeeds B. E. Mellum as manager of the Middle River Farmers Co-operative Elevator at Middle River, Minn.

A new warehouse and office have been completed at Bigelow, Minn., for the Farmers Elevator Company. A feed mill is to be installed.

Alfred Miller is manager of the Farmers Elevator at Appleton, Minn. He was formerly at Person & Lee's elevator at Montevideo, Minn.

The old Farmers Elevator Company's elevator at St. Clair, Minn., has been bought and is being operated by the Commander Elevator Company.

Improvements are being made to the plant of the Speltz Grain & Coal Company at Glenville, Minn. The company is also installing a feed grinder and corn crusher.

The contract has been let by the Farmers Co-operative Elevator Company of Garvin, Minn., for a 25,000-bushel elevator, flour house and coal shed. Fairbanks-Morse Motors are used.

A new elevator is being built at Gibbon, Minn., for the Farmers Elevator Company. It will be equipped with Fairbanks-Morse Motors, automatic scale, manlift, and other modern machinery. The office building will consist of a two-room structure. This will replace the old elevator which has been torn down.

Last autumn Frank H. Blodgett, Inc., of Janesville, Wis., built a monolithic concrete elevator, the work being done by the Polk Genung Polk Company of Fort Branch, Ind. The same builders

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Fourth Year

have been awarded another contract to increase the capacity of the elevator by the addition of more bins. The work will be done, it is expected, early this summer.

Grain, coal and a complete line of feed is to be handled by the new company organized at Lakewood, Minn., to be known as the Lakewood Grain Company. H. P. Schnepf is president.

The business and good will of the Lakeville Co-operative Farmers Elevator & Exchange at Lakeville, Minn., has been bought by Martin Sorlie who will operate under the name of the Lakeville Elevator Company.

The Northland Elevator at Oklee, Minn., has been bought by the Oklee Farmers Co-operative Elevator Company for a seed cleaning house. A scarifier and cleaner for Sweet Clover and other seeds is to be installed.

A new 20,000-bushel elevator annex is being built for the Farmers Elevator Company of Comstock, Minn. It will also improve the old elevator by installing a new steel boot tank, another elevator leg, distributors and a 15-horsepower motor.

The contract has been let by the Cargill Elevator Company of Duluth, Minn., to the Barnett & Record Company for 31 tanks and 32 bins at its plant at Superior, Wis., which will give additional capacity of 750,000 bushels or a total of about 5,000,000 bushels.

The old elevator of the Farmers Elevator Company at Guckeen, Minn., is to be dismantled and a new elevator of 30,000 bushels' capacity erected on its site. They will also build an office building. A Fairbanks-Morse Engine and Scale are included in the equipment.

The contract has been let by the Hazel Run Produce Company of Hazel Run, Minn., for a 20,000-bushel elevator. It will have 12 bins and two legs equipped with 11x6 inch buckets. There will be a 2,000-bushel scale in the cupola for shipping purposes. A 10-ton Fairbanks Scale with dump installation is to be put in.

WESTERN

G. C. Bixler succeeds Irvin Keena as manager of the Hugo Farmers Elevator Company at Hugo, Colo.

The grain and mill business of E. P. Nelson at Mt. Vernon, Wash., has been bought by W. H. Hazelton and Dave Fisher.

New mixing and sacking machinery is being installed in the elevator of the Gooding Mill & Elevator Company of Gooding, Idaho.

Frank Robinson has resigned as manager of the Farmers Grain & Milling Company of Hazelton, Idaho. L. E. Webb succeeds him in the position as manager.

The Hudson Grain & Bean Company of Hudson, Colo., has leased the Hudson Community Elevator. W. W. McBride is manager. The company will add a feed plant.

E. W. and Edna Murphy have incorporated as E. W. Murphy, Inc., at Auburn, Wash., and will deal in grain, hay and feed. The capital stock of the firm is \$100,000.

L. M. Smith has resigned as manager of the Waterville Union Grain Company of Waterville, Wash. N. P. Friel has been selected to take his place on June 1.

The contract has been let by the Burlington Farmers Equity Elevator Company of Burlington, Colo., for the construction of additional storage bins. Construction work will start soon.

The elevator which the Romer Mercantile Company bought at Holly, Colo., recently, is to be remodeled by it. The elevator was bought from the Isabel Bean Company.

The incorporators of the Pacific Grain Products Company which has been organized at Tacoma, Wash., are F. M. Fairbanks and Charles L. Powell. The capital stock of the firm is \$10,000.

The warehouses of the Mikkelsen Grain Company at Leon and Uniontown, Wash., have been bought by the Uniontown Co-operative Association. Plans are being made for making immediate improvements.

A two-story building is to be built at Nampa, Idaho, for the Nampa Seed & Grain Company. This is because business has increased necessitating the purchase of the land and the erection of the new building.

The Lincoln Grain Growers, Inc., of Lincoln, Calif., has bought the California Farm Bureau Elevator Company and has issued a note of \$13,000 to Andy Rasmussen and a \$5,000 note to the Bank of Lincoln.

A new warehouse is to be built at Valley Grove, (Walla Walla p. o.), Wash., for the farmers replacing the two which burned. It will have capacity of 200,000 bushels grain. The company is capitalized at \$15,000.

Articles of incorporation have been filed by the Walluk Investment Company of Walla Walla,

Wash. John H. Pedigo, John D. Ankeny, and John F. Watson are interested. The company will operate elevators and warehouses, public and private, and deal in all kinds of grain, hay and feed.

The Farmers Elevator Company was recently organized at Opheim, Mont., capitalized at \$25,000. John L. Mason is president; Charles H. Reed, vice-president; A. T. Olson, secretary and treasurer. A 35,000-bushel elevator is to be erected by the new company.

The Rocky Mountain Grain Company of Denver, Colo., has built a new elevator at First View, Colo. This elevator will be another receiving station for the Colorado Milling & Elevator Company of which the Rocky Mountain Grain Company is a branch. It has a capacity of 20,000 bushels.

The Kessler-Perkins Grain Company has sold its grain elevator at Harrington, Wash., to the Quincy Farmers Elevator Company of Quincy, Wash. The new owners have contracted to have it torn down and removed to Quincy where it will be rebuilt. When conditions warrant, the Kessler-Perkins Company expects to build another grain warehouse at Quincy.

MISSOURI, KANSAS AND NEBRASKA

M. S. Pearson is manager of the Farmers Grain Company at Osceola, Neb.

N. Everson has resigned as manager of the Farmers Elevator at Bigelow, Kan.

V. J. Biberich is manager of the Petersburg Elevator Company of Petersburg, Neb.

Steve Skolil is manager of the Crete Grain & Livestock Association at Crete, Neb.

The Ansley Livestock & Grain Company of Ansley, Neb., has begun operations there.

A new elevator is to be built for the Farmers Elevator Company at Montezuma, Kan.

A. W. Steen of Meade has bought the A. B. Minshall Grain Company at Anthony, Kan.

The Norwich, Kan., elevator of the Anthony Mills Company of Anthony, Kan., has been sold.

The Farmers Union Co-operative Grain Company is to build a new elevator at Venaugo, Neb.

New equipment has been added to the elevator of the Farmers Elevator Company located at Peru, Neb.

Thomas F. Bryan is manager of the Farmers Elevator at Speed, Mo., succeeding his brother.

Capitalized at \$25,000, the Colby Mill & Elevator Company has been incorporated to operate at Colby, Kan.

The Farmers Elevator at Gering, Neb., has been bought by the Lexington Mill & Elevator Company.

Harry Lamb succeeds F. M. McGrew as secretary of the Farmers Elevator Company of Callaway, Neb.

Chris Jensen was recently appointed manager of the Davey Co-operative Grain Company of Davey, Neb.

The interest of the Farmers Grain & Milling Company at Potter, Neb., has been bought by John Witt.

The elevator at Sumner, Neb., of the Trans-Mississippi Grain Company has been bought by L. C. Scudder.

L. C. Schultz succeeds O. Heim as manager of the Farmers Elevator & Supply Company at Vandalia, Mo.

The Warrensburg Shipping Association of Warrensburg, Mo., has changed its name to the Farmers Elevator.

A modern elevator has been completed on the farm of Louis Knochke, a farmer in the vicinity of Plymouth, Neb.

C. E. Benshof has traded a piece of land for the Farmers Union Elevator at Winside, Neb., owned by Fred Jensen.

The mill and elevator of the Plainville Mill & Elevator Company at Plainville, Kan., has been bought by M. T. Bair.

O. W. Miller is succeeded by Mr. Pearson as manager of the Farmers Grain Company at Durant (p. o. Stromsburg), Neb.

The Heller Elevator at Solomon (near Abilene), Kan., has been bought by the Mid-West Milling Company of Abilene, Kan.

Ed Melahn, B. Beckman, Albert Erdel, J. R. Snook and Fred Doeblin have bought the Farmers Elevator at Rush Hill, Mo.

The Lane Elevator Company's plant at Lane, Kan., has been bought by the Lane Grain Company. D. C. Whitaker is manager.

Joseph Coon, Grant Lewis, and Edward Kauffman have sold their elevator at Princeton, Mo., in order to dissolve the partnership. Joseph Coon bought the property for \$6,000 and will conduct it in the future.

The Buchanan Elevator at St. Joseph, Mo., has been leased by the Trans-Mississippi Grain Company of Omaha, Neb. The elevator has a capacity

of 1,000,000 bushels. R. E. Wiese of Omaha will go to St. Joseph as manager of the St. Joseph office of the company and will conduct a general grain business there.

Reports are current that the Farmers Co-operative Company of Stratton, Neb., will erect a grain elevator of 15,000 bushels' capacity.

Hobart West succeeds Mr. Dooley as manager of the Rydal Farmers Elevator & Coal Company at Rydal, Kan. This takes effect July 1.

A new 20,000-bushel elevator is being built at Muscotah, Kan., for the Kelley Grain Company. It will be ready in time for the new crop.

O. C. Glenn has resigned as manager of the Union Grain Company of Rozel, Kan., after 13 years with the firm, and will move to Haviland, Kan.

The interest of R. E. Cheers in the elevators at Frizell (p. o. Larned), Kan., has been bought by H. E. Hill. He will operate it under his own name.

The contract has been let by Herb Spencer for the erection of a new elevator and warehouse at Valley Falls, Kan. The construction was started at once.

A new grain elevator is being erected at Friend, Neb., for the Barstow Grain Company of Lincoln, Neb. It will be completed in time to handle the coming grain crop.

The stock of the lumber and grain business at Lodge Pole, Neb., owned by the Melville Lumber Company of Broken Bow, Neb., has been bought by the S. A. Lumber Company.

The Ludlow Grain & Elevator Company of Ludlow, Mo., has raised its elevator another story and completed a feed room. It has also installed a new set of feed rolls and will handle grain and all kinds of mill feeds.

Joe Brada is now associated with the Southwestern Grain Company of Hutchinson, Kan. He recently resigned as manager of the grain department of the Walnut Creek Milling Company at Great Bend, Kan.

The two elevators of the Smith Grain Company and Joseph Reiter at Indianola, Neb., are to be consolidated. The Smith Elevator is to be improved and while this work is being done, grain will be received at the Reiter house.

Melvin L. Robb, manager of the Farmers Elevator Company, Ruby (Milford p. o.), Neb., has succeeded M. J. Drescher as manager of the Raymond Co-operative Grain Company at Raymond, Neb. Walter Robb succeeds his brother at Ruby.

THE DAKOTAS

The Farmers Elevator Company at Fredonia, N. D., is being reorganized.

A 15,000-bushel annex is to be built to the elevator of John Southall at Berlin, N. D.

The Maple Leaf Grain Company of McLaughlin, S. D., has decided to build a new elevator at that place.

A modern office is to be built at Sisseton, S. D., for the Farmers Co-operative Elevator Company of that place.

A new foundation is being built under the elevator of the Farmers Elevator Company at Sheldon, N. D.

Improvements have been made and new machinery installed by the Garske Elevator Company of Garske, N. D.

Lightning rods have been installed on the elevator and buildings of the Farmers Trading Company at Volin, S. D.

A branch office has been opened at Minot, N. D., for the Interstate Seed & Grain Company for the wholesale trade.

The Johnson-Westlie Elevator at Van Hook, N. D., has been bought by the Woodworth Elevator Company of Minneapolis.

E. H. Wahl is contemplating the purchase of the Gackle Elevator at McClusky, N. D., and will operate it during the coming year.

The Maple Leaf Grain Company, A. W. Ballwehr, manager, has let the contract for a 30,000-bushel elevator at Maple Leaf, S. D.

The elevator of Fred Moeller & Son at Nunda, S. D., is to be remodeled, repaired and equipped with lightning rods this season.

The elevator of the Farmers Elevator Company of Bath, S. D., is to be equipped with a 10-ton Fairbanks Scale and Strong-Scott Dump.

Grisdale & Weimer is operating the former Farmers Co-operative Association at Worthing, S. D., as the Worthing Grain Company.

The Schulz Grain Company has bought the property of the Dodge Elevator Company at Falkirk, N. D. It has sold its property at McLusky.

The elevator of the Farmers Elevator Company at Belfield, N. D., which it has been conducting for 10 years, has been sold to Erickson & Beaudoin.

Extensive improvements are being made to the property of the Harwood Farmers Elevator Com-

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pany of Harwood, N. D. A large office will be built; driveway enlarged; Strong-Scott Dump installed; one cupola raised and distributor installed.

Some repair work has been done to the Wakpala, S. D., elevator of the Liberty Grain Company. This included the installation of a Strong-Scott Dump.

The grain elevator at Venlo, N. D., formerly operated by John Arlans has been bought by A. E. Carter and L. S. Legg. They will take possession July 1.

A new four-bin coal shed is to be built to the elevator of the National Elevator Company of Argusville, N. D., and repairs are being made to the elevator.

The Independent Grain Company has bought the elevator of the Fryburg Farmers Co-operative Elevator Company at Fryburg, N. D. A. E. Erickson is manager.

The Farmers Independent Elevator Company of Sanish, N. D., has let the contract for the erection of a 30,000-bushel elevator. Work is being done immediately.

The Farmers Elevator Company of Vienna, S. D., has installed a Fairbanks-Morse dust proof, ventilated 7½-horsepower electric motor. G. M. Thompson is manager.

The Farmers Co-operative Elevator Company of Norma, N. D., is considering the erection of a 40,000-bushel elevator, equipped with a double leg and arranged with cleaning facilities.

The elevator of the Fullerton Equity Elevator at Fullerton, N. D., is being overhauled and improved quite extensively. The company is installing a truck dump and some new machinery.

The Wheeler Elevator and other buildings in connection with it at Scotland, S. D., have been bought by J. F. Schmidt. The property is rented by the Terminal Elevator Company of Sioux City.

A 25,000-bushel elevator is being built at Sutton, N. D., by the Minnesota Elevator Company of Minneapolis, Minn. It will be a duplicate of the plant built for the company last year at Norma, N. D.

A large ironclad elevator is being built at Barlow, N. D., for the Barlow Grain & Stock Exchange. It will be constructed on a slab foundation with 22 bins, two legs, boot tank, buckets, automatic scale and 15-horsepower Type Z Fairbanks-Morse Engine.

The property of the Monarch Elevator Company at Arthur, N. D., has been bought by Jessmaine S. Burgum and Elizabeth Vosburg, two directors of the Farmers Elevator Company. They have leased the property to the Farmers Elevator Company to be used in the storage and handling of seed grain. Business will be started on July 1.

ILLINOIS

The elevator and warehouse of T. L. Oliver at Camp Point, Ill., is being improved.

A new elevator has been completed at Allendale, Ill., for the Pioneer Grain Company.

A corn sheller is to be installed in the elevator of the Farmers Company at Sharpsburg, Ill.

A truck scale is to be installed in the elevator of the Co-operative Elevator Company at Reynolds, Ill.

A corn crusher is to be installed by the Farmers Elevator Company of Warren, Ill., in its elevator there.

V. C. Brown is manager of the Farmers Elevator Company at Trivoli, Ill., succeeding S. C. Van Horne.

The Potter Bros.' elevator at Morrison, Ill., is being torn down to make way for another elevator structure.

Some improvements are to be made to the plant of the Chebanse Grain & Coal Company at Chebanse, Ill.

Electric motors are to be installed in the elevator of the Farmers Grain Company located at Waggoner, Ill.

The Farmers Grain Company of New Berlin, Ill., has let the contract for the erection of a new concrete elevator.

The interest of H. W. Linder in the elevator at Lostant, Ill., has been sold by him. John McLuckie will be manager.

A new elevator is being built at Charleston, Ill., by Albert McComes. This replaces the one which burned some time ago.

George L. Merritt is now manager of the South Elevator at Alvin, Ill. He was formerly in the grain business at Rossville.

Mr. Ledbetter succeeds S. H. Baker as manager of the Pierson Grain & Supply Company at Pierson (p. o. Pierson Station), Ill.

The elevator and milling property of the Ashbrook Milling Company at Mattoon, Ill., has been bought by W. Ernest Orndorff.

A modern cement elevator is being built at New Berlin, Ill., for the Farmers Grain Company, replacing the one which burned. It is of 40,000 bush-

els' capacity and is equipped with truck dumps, three Fairbanks, Morse Motors, sheller, cleaner, manlift and automatic scale.

A new building is being erected at Piper City, Ill., by J. K. Montelius to be occupied by the Cunningham Grain Company when completed.

The Dovel-Shaw Grain Company's business at White Hall, Ill., has been bought by the White Hall Co-operative Mill & Elevator Company.

The name of the Farmers Co-operative Elevator Company at Dundee, Ill., and Gilberts, Ill., has been changed to the Dundee Farmers Company, Inc.

The Andres-Wilton Grain Company of Andres (Peotone p. o.), Ill., is to build some new coal sheds and make other improvements this spring.

Howard Carter has resigned as manager of the Farmers Elevator Company at Laura, Ill. He has bought a grain business at Garber, Ill., and will operate it.

C. H. Comstock & Co., of Ashkum, Ill., have just put lightning arresters on their 150,000-bushel elevator. They expect to paint all of their buildings this summer.

The interests of the Frank Rudy Estate in the six Rudy-Huston Elevator at Paris, Ill., Conlogue, Vermillion, Oliver, Mays, Dudley have been bought by E. Perry Huston.

To conduct a retail grain and coal business, N. J. Kautz & Sons were incorporated at Mt. Pulaski, Ill., capitalized at \$20,000. The incorporators are J. M. W. G. and E. L. Kautz.

The elevator at Coulton (p. o. Mendota), Ill., of the William Marks' estate has been bought by the Troy Grove Farmers Co-operative Company. James O'Neill will manage both elevators.

John H. Hildebrands has leased the Smith Hippen Elevator at Emden, Ill., and will conduct from there his grain business which he formerly conducted from the house which burned.

Claude Turner is to be field manager of the 36 grain elevators in Illinois and Indiana owned by Paul Kuhn & Co. He was formerly general manager of the Hume Elevator at Hume, Ill.

The two grain elevators at Tabor, Ill., have been leased by Lukenbill & McBride of Kennedy. They will operate them in connection with their other elevators, at Kennedy and Midland City.

The Fogarty Grain Company has been incorporated at Lincoln (r. f. d. No. 3), Ill., capitalized at \$15,000. The incorporators are Jess E. Eury, E. R. Warrick, J. D. Sparks and Thomas Sparks.

The Lawndale Grain Company has been incorporated at Lawndale, Ill., to deal in grain, coal, building materials and general merchandise. H. O., F. W. and Grove C. Kiest are the incorporators.

Mr. Arnold succeeds Adam P. Eaton as manager of the Farmers Elevator Company at Jamaica, Ill. Mr. Eaton is going to Allerton where he will manage some elevators, which he and his associates own.

H. H. Timmerman's elevator at Beekemeyer, Ill., has been completed and put into operation. It has a capacity of three carloads of wheat and a shelling capacity of 200 bushels per hour. He has also installed a feed mixing plant.

The elevator of the Farmers Elevator Company at Strawn, and that at Risk (no p. o.), Ill., have been sold under the sheriff's hammer. Harry Tjardes of Strawn, owner of the two other elevators was the buyer. The consideration was \$15,000.

The Staley Manufacturing Company of Decatur, Ill., is making plans for the construction of three large driers. One will be used for soy beans exclusively, one in connection with the new elevator which they expect to acquire and one in connection with the large terminal elevator which they are planning to build.

SOUTHERN AND SOUTHWESTERN

C. C. Edwards is now manager of the Clifton Grain & Elevator Company of Clifton, Texas.

The elevator of the Josey-Miller Company at Beaumont, Texas, which burned, is to be rebuilt.

The Folkston Grain & Feed Company of Folkston, Ga., is now occupying new and better quarters.

Frank Kolm succeeds Sidney Barnes as manager of the Chickasaw Elevator Company of Blanchard, Okla.

The Lipscomb Grain & Seed Company at Afton, Okla., has been bought by the Allison Grain & Seed Company.

The Floyd County Wheat Growers Association has bought the W. J. Burke Grain Elevator at Floydada, Texas.

The Farmers Grain & Lumber Company of Wheatland, Okla., is to make some improvements on its old elevator.

The Hinson-Hockaday Grain Company at Mineral Wells, Texas, has been bought by the Rider-Prim Grocery Company.

The contract has been let by E. W. Harrison of Hereford, Texas, for a 50,000-bushel elevator. It

is designed for two legs. Modern machinery will be installed. The elevator is being erected on the old foundation.

The elevator of the Farmers Elevator Company at Mangum, Okla., has been closed and the stock sold to C. O. D. Grocery.

Claude Whitaker of Columbia, Tenn., has bought the elevator of the Lewisburg Mill & Elevator Company of Lewisburg, Tenn.

Improvements are to be made and a warehouse built for the Western Grain Company of Birmingham, Ala., at a cost of \$30,000.

A grain elevator with capacity of 160,000 bushels is to be built at Franklin, Tenn., for the Lillie Mill Company of which C. H. Corn is owner.

The business and elevator of the Farmers Co-operative Association at Bretch (p. o. Roosevelt), Okla., has been bought by G. N. Dickson.

Capitalized at \$10,000, the Uhlmann Grain Company has been incorporated at Fort Worth, Texas. Fred Uhlmann and E. L. Love are interested.

The name of the Lowery-Lewis Grain Company at Houston, Texas, has been changed to the Seaport Grain Company and the charter has been amended.

The Perry Burrus Elevator, Dallas, Texas, have been incorporated, capitalized at \$225,000. J. Perry Burrus, J. C. Crouch and Fred Home are interested.

A new office building is being built by the Afton Mill & Elevator Company of Afton, Okla., and the storage capacity increased from 18,000 to 25,000 bushels.

A 17,000-bushel elevator is being built for the El Reno Mill & Elevator Company at Hydro, Okla., on the site of the McCafferty Elevator which burned.

A wholesale office is to be opened about July 1 by the E. O. Billingslea Grain & Cotton Company of Amarillo, Texas. They also have an office at Farwell.

The elevator of the Zalabak Grain Company at Kingfisher, Okla., which burned, is to be rebuilt. It will be of concrete construction with capacity of 25,000 bushels.

A modern seed cleaner is to be installed in the property of Jones-McLean, local grain dealers at Hereford, Texas. All seed handled by the company will be recleaned.

The Heller-Stadler Elevator at Cashion, Okla., has been bought by the Pennington Grain Company. The company will sell mill feed and flour and do some grinding in addition to handling grain.

The Blue Grass-Elmendorf Grain Corporation of Lexington, Ky., is to move one of its elevators to make room for street improvements. It is a 30,000-bushel crib construction elevator and will be moved a distance of 200 feet.

John L. Davis has been appointed receiver of the Davis-Prater Company, grain dealers of Newport, Tenn., at the request of Bruce and John L. Davis, owners. The company is solvent with assets of \$40,000 and debts of \$15,300.

A new elevator is being built at Keys (no p. o.), Okla., for the L. H. Pettit Grain Company to be completed June 20. It will be ironclad of modern equipment. S. L. Gamble of Elkhart, Okla., will manage it. This makes the sixth elevator owned by the Pettit Grain Company.

A partnership has been formed by W. M. Randels and W. C. Williams at Enid, Okla., as the Randels-Williams Grain Company. Mr. Randels served as president of the Oklahoma Grain Dealers Association and was for 27 years in the grain business at Enid, operating a line of country elevators as Randels & Grubb, and later as W. M. Randels Grain Company. Mr. Williams has been associated with W. B. Johnston of Enid for the past two years. The company will do a general merchandising of all kinds of grain and feed. Its offices are 610 American National Bank Building.

The new elevator of the Enid Terminal Elevator Company at Enid, Okla., which is being built by the Jones-Hettelsater Construction Company of Kansas City, Mo., will be ready for business by June 1. It consists of a headhouse, 12 circular bins with corresponding interstices, giving a total of 53 bins. The entire plant is built of reinforced concrete including track sheds and galleries. The equipment consists of three main elevator legs having a capacity of 8,000 bushels per hour each; one screenings leg, 6,000 bushels per hour; armored grain cleaner, 1,500 bushels per hour; armored clipper; Carter Disc Separator; two 2,500-bushel hopper scales; double automatic power shovel; heavy duty car puller; suction system; signal system; necessary belt conveyors; and spouting. All the equipment is driven by individual electric motors.

Work has been started by the Jones-Hettelsater Construction Company of Kansas City on the new elevator for which it has the contract from the Southwest Terminal Elevator Company. It will be ready by August 1. This company was recently incorporated, capitalized at \$250,000, by James W.

Maney, John Maney and John K. Landes. These men are the principal owners of the Canadian Mill & Elevator Company, El Reno, Enid Milling Company, Enid, Okla., and the Maney Milling Company, Omaha, Neb. The elevator is similar to that being built for the Enid Terminal Elevator Company. It consists of a headhouse, 12 circular bins with corresponding interstices. The entire plant is built of reinforced concrete including the track sheds and the galleries. The equipment consists of three main elevator legs with capacity of 8,000 bushels per hour each, one screenings leg of 6,000 bushels per hour capacity, armored grain clear of 1,500 bushels per hour capacity, armored clipper, Carter Disc Separator, two 2,500-bushel hopper scales, double automatic power shovel, heavy duty car puller, suction system, signal system, necessary belt conveyors and spouting. All equipment is driven by individual electric motors.

CANADA

The Manitou, Man., elevator of the Manitoba Government has been sold to Herbert Tucker, W. A. Parker and James Larmour.

A new 40,000-bushel elevator is being built at Picture Butte, Alta., for the Ellison Milling & Lumber Company, Ltd., of Lethbridge.

The F. B. Stevens Company, Ltd., of Chatham, Ont., is using a Randolph Direct Heat Drier for the drying of seed corn. This is the second Randolph Drier Mr. Stevens has purchased.

It is expected that by the middle of May, erection of shipping conveyor galleries will be completed which will have a capacity of 1,000,000 bushels per 10 hours and which will increase the shipping ca-

capacity of Elevator B at Montreal harbor about 50 per cent. It is expected that one gallery with a capacity of 60,000 bushels per hour for two belts will be ready for operation.

J. M. Wiley, a grain operator at Winnipeg, has bought a group of 15 elevators from the Province of Manitoba. The sale price was given at \$30,000. The provincial government intends to dispose of all of its elevators.

The Maple Leaf Milling Company is planning to make additions to the buildings of the Alberta Pacific Grain Company recently acquired from the Spillers interest. The Alberta company has more than 200 elevators.

The Reliance Terminal Elevator Company of Fort William, Ont., has installed a 500-bushel Randolph Drier operating with direct heat system and reports that it is more than satisfactory operating in zero weather on frozen wheat.

The capacity of Elevator No. 3 of the Vancouver Harbor Board may be increased this summer by the Burrard Elevator Company to 1,000,000 bushels. The Grain Growers Grain Company of Winnipeg has leased the elevator and may take a 22-year lease on it.

The Saskatchewan Co-operative Elevator Company has decided to sell its elevators to the Saskatchewan Wheat Pool. The Saskatchewan property included in the sale are 450 country elevators in Saskatchewan; 27 annexes; headquarters office building in Regina; Port Arthur terminal elevators 1 and 2; lease of the Canadian National Railway's terminal elevator at Port Arthur; terminal transfer elevator and premises at Buffalo; and about 30 elevator agents' houses.

OBITUARY

AULL.—A. P. Aull, a member of the firm of Aull & Co., pioneer grain dealers of Lexington, Mo., died recently.

BENSON.—Olaf F. Benson died at Fairmount, Ill. He owned an elevator and mill there.

BINNISTER.—H. H. Binnister died on April 8 at Peoria, Ill. He was one of the oldest members of the Board of Trade.

BURGE.—Porter C. Burge died at his home in Pasadena, Calif., aged 61 years. He was a pioneer grain dealer at Hopeton, Okla.

BUSS.—Herman Lincoln Buss died at his home in Medford, Mass., aged 70 years. He had for 50 years been a member of the Boston Chamber of Commerce. He had been in the wholesale grain business at Boston since a young man. He became president of H. L. Buss Company and remained its head until he retired a few years ago from business.

CAMPBELL.—Harry B. Campbell died on March 30 at Iowa Falls, Iowa. He was manager of the Farmers Elevator Company.

COCHRANE.—Manning W. Cochrane died on April 28. He was well known in St. Louis grain circles having been president of the St. Louis Merchants Exchange in 1910. He was connected with the Nebraska Consolidated Mills Company.

COUCH.—Lucius M. Couch died from influenza on April 19 aged 65 years. He was a feed dealer in Kansas City, Mo., for eight years.

CRAIG.—Vincent Craig died on May 2 at his home in Darlington, Ind. He for years owned and operated a grain elevator at that place. He was 72 years.

CROSSMAN.—William A. Crossman, secretary of the Osborn-McMillen Elevator Company of Minneapolis, Minn., died recently. He had been associated with the firm for 23 years and for a long period was manager of the company's elevator at Glenwood.

DANIELS.—Ed Daniels died at Worthington, Minn. He for several years conducted a grain elevator at Sulphur Springs, Iowa.

DUNCAN.—Wylie L. Duncan died after a long illness. He was for years with the Samuel Hastings Company of Cairo, Ill.

FOOTE.—Harry H. Foote died aged 58 years at Des Moines, Iowa. He was formerly in the grain business at Parkersburg, Iowa.

GROVER.—Arthur W. Grover died recently at his home in Portland, Ore., where he had lived for 23 years. He was president of the Portland Elevator Company.

HANNAN.—James Hannan died at his home in Milwaukee, Wis., aged 83 years from heart trouble. He had since 1876 been a member of the Milwaukee Chamber of Commerce. His widow and 10 children survive him.

HOPKINS.—H. E. Hopkins died on April 7 aged 42 years. He was a grain and lumber dealer of

Bradford, Ill. His widow survives him.

HUSTED.—E. M. Husted died on April 16. He was formerly president of the Buffalo Corn Exchange and the Superior Elevator Company of Buffalo. He entered the feed business with his father as a young man. The Husted Mill & Elevator Company was incorporated in 1898. Five years later the firm bought the Nickel Plate Elevator and in 1905 the name of the company was changed to the Husted Milling Company. He organized the Superior Elevator Company in 1914 and operated it until last fall when it was sold.

KENNING.—Charles Kenning, an active worker for the Minnesota Farmers Grain Dealers Association, died on April 17 at his home in Bird Island, Minn.

LEWIS.—Calvin E. Lewis died on April 24. He had been a member of the Milwaukee (Wis.) Chamber of Commerce since 1862.

LOSER.—Edward G. Loser died from pneumonia, aged 62 years. He was for 26 years traffic manager of the Albert Dickinson Seed Company of Chicago, Ill. His widow, a son and a daughter survive him.

MAINES.—N. C. Maines, after a series of illnesses, committed suicide. He was a member of the National Hay Association and was engaged in business at Wooster, Ohio.

McKENZIE.—Arthur E. McKenzie died at the home of Mrs. Fullenwider at Mechanicsburg, Ill. He was a prominent grain dealer in Oklahoma and

Kansas and was formerly a resident of Taylorville, Ill. Before his retirement from business a year ago he was with the McKenzie Milling Company of Taylorville.

MELLIER.—H. Frank Mellier died recently. He was associated with Hayward & Co., flour, feed and grain dealers at Baltimore, Md. He was a member of the Baltimore Chamber of Commerce.

MILLER.—R. M. Miller died suddenly at New Orleans, La., on March 14. He was engaged in the hay business there.

MUNSINGER.—L. E. Munsinger died from asphyxiation on April 21 at his home in Ames, Iowa. He was formerly secretary of the Ames Grain & Coal Company. His widow and a daughter survive him.

NADING.—William Nading died at his home in Shelbyville, Ind. He owned elevators at Greensburg, Adams, St. Paul, Prescott, Penns. Waldron and Lewis Creek, Ind.

PEVEAR.—Ralph H. Pevear died suddenly at Ottawa, Canada, while on a visit there. He was a grain dealer of Swampscott, Mass.

PILOTTE.—Max D. Pilotte, who conducted a grain elevator at Martinton, Ill., died on April 17 at Chicago, Ill.

PRENTISS.—Robert T. Prentiss died from asphyxiation at his home in Holyoke, Mass., on April 18. He was founder of the grain firm of Prentiss, Brooks & Co.

PRICE.—Emmanuel H. Price died recently. He was a prominent feed and flour dealer of Philadelphia, Pa., and a member of the Commercial Exchange for 43 years. He had been a member of the Board of Directors for 30; and treasurer since 1918.

RITTENHOUSE.—Joseph H. Rittenhouse died on April 20, aged 82 years. He was a retired grain dealer of Columbus, Ohio.

ROSE.—G. P. Rose died on April 17 after an illness of six weeks. He was said to be the oldest member of the local grain trade at Nashville, Tenn. He was head of the firm of G. P. Rose & Co., which he established in 1882. He was 79 years old. His widow and three sons survive him.

SIMMONS.—Fred J. Simmons died at Orlando, Fla. He was formerly president of the Detroit Board of Trade and had been in the grain business for over 50 years.

SMITH.—O. A. Smith died suddenly at Webb, Iowa, where he was manager of the Levertt Grain Company. He was 68 years old.

TREXLER.—David S. Trexler died at his home near Shamrock, Pa., after a long illness on April 21. He was for years operator of grain and lumber plants at Mertztown, Shamrock and Kutztown, Pa.

VEHON.—Louis S. Vehon died from heart disease. He was associated with M. L. Vehon & Co., in the Chicago Board of Trade. His widow and two daughters survive him.

WARD.—A. R. Ward died aged 37 years at his home in Grand Junction, Colo., on April 30. He was senior partner in the firm which owned and operated the Grand Junction Seed Company. His widow and two daughters survive him.

WARE.—J. H. Ware died after an illness of three months. He was partner in Ware & Co., grain dealers, New York City, and a former member of the New York Stock Exchange.

WICHMAN.—F. W. Wichman, who was manager of the elevator at Mapleton, Minn., committed suicide recently.

WILSON.—Robert S. Wilson, for 30 years office manager of the McCarthy Bros. grain dealers Duluth, Minn., died on May 1.

FIRES—CASUALTIES

Jonesboro, Ark.—Fire destroyed the R. Q. Steele Feed Store.

Norphlet, Ark.—Fire destroyed the Daniels & Downs Feed Store here.

Cumberland, Ohio.—Fire on April 17 destroyed the W. N. Petty Elevator.

Freda, N. D.—Fire destroyed the elevator of the Farmers Equity at this place.

Homer, Ill.—The elevator of J. C. Koehn was totally destroyed by fire recently.

Reinbeck, Iowa.—The Moeller & Walter Grain Elevator was destroyed by fire.

Pasadena, Calif.—A small loss was sustained by the Union Feed & Fuel Company on April 14.

Mantorville, Minn.—The elevator of the Mantorville Farmers Co-operative Elevator Association was destroyed by fire which started from an unde-

termined origin. The loss was \$10,000. Coal shed adjoining the elevator also burned.

Wolf Lake, Ill.—Fire destroyed the Farmers' Elevator here. The building was empty at the time.

Emden, near Lincoln, Ill.—A grain elevator of John Hildebrand burned with a loss of \$8,000 on April 19.

Callender, Iowa.—The elevator of the Callender Grain Company was damaged slightly by fire on April 22.

Chatterton (Pine Village p. o.), Ind.—Fire destroyed on April 22, the elevator of the Davis Grain Company.

Denver, Colo.—The Diamond Supply Company suffered fire loss in its hay and grain warehouse on April 17.

Eldon, Mo.—Fire destroyed the plant of the

Farmers Exchange. The insurance carried amounted to \$10,000.

Meridian, Miss.—The elevator of the Sturges Company, manufacturers of feeds, burned with a loss of \$100,000.

Huntington, W. Va.—The property of the Mootz Feed Company was destroyed, probably completely, by fire on April 22.

Tontogany, Ohio.—The elevator of the Royce-Coon Grain Company was destroyed by fire of unknown origin on April 28.

Woodington (near Greenville), Ohio.—The C. C. Mendenhall Grain Elevator burned with a loss of about \$10,000, on April 16.

Indianapolis, Ind.—Losses were sustained at the Midwest Grain Elevator on May 6, from fire, caused by spontaneous combustion.

Emporia, Kan.—Fire which originated in a box car slightly damaged the warehouse of the Lord Grain Company on April 29.

Kamsack, Sask.—The elevator of the Pioneer Grain Company was struck by lightning and only slightly damaged on April 23.

New Rockford, N. D.—Damages amounting to \$11,000 were done by fire to the property of the Greenbeck Seed & Feed Company.

Indiana, Pa.—A short circuit in the electric motor was the cause of a small loss to the elevator of the Farmers Exchange on April 14.

Hoisington, Kan.—Fire destroyed the elevator of the Hoisington Mill & Elevator Company. The blaze originated in a rubbish heap outside the elevator.

Leavenworth, Kan.—Fire damaged, with a loss of \$40,000, the property of the Cranston-Liggett Grain & Feed Company. The loss was covered by insurance.

Indianapolis, Ind.—The two grain elevators of the Cleveland Grain & Milling Company burned with a loss of nearly \$500,000. More than 150,000 bushels of grain burned.

Highland Center, Iowa.—The elevator of the Highland Center Farmers Association burned on April 13, following an explosion of the gasoline tank on an engine.

Newark, S. D.—The elevator of the Newark Farmers Elevator Company was slightly damaged by fire which originated in the gasoline house and communicated to the office.

St. Joseph, Mo.—Fire on April 21 damaged the warehouse of the Grain Belt Mills Company with a loss of \$1,250,000. The warehouse contained a large quantity of hay at the time.

Weiser, Idaho.—On April 11, the grain warehouse of the Tri-State Terminal Company was destroyed by fire, together with 12,000 bushels grain. The warehouse was leased by M. P. Tenning.

North River (Mark p. o.), Mo.—Fire on April 8 destroyed the plant of the North River Elevator Company with 2,000 bushels corn and 600 bushels wheat. The loss was \$10,000 on building and grain.

THE GRAIN WORLD

Dispatches from Guatemala relate that on account of the "unusually long drought, poor flowering, and grasshopper pest, all in the lowlands, the June corn has been damaged, necessitating heavy grain imports from the United States and Mexico."

* * *

The second estimate of India's 1926 wheat acreage, 29,711,000 acres, shows a slight increase over the first estimate. It is still 7 per cent below last year's final estimate of 31,773,000, but somewhat higher than the 1919-23 average of 27,700,000 acres. Winter rains have been reported in some sections, but they have not been sufficient to make up for the inadequate moisture supply at the beginning of the season caused by the early cessation of the monsoon.

* * *

"International Trade in Wheat and Wheat Flour" is the title of a bulletin of 159 pages of text, charts and tables, besides an appendix of 131 pages of tables, issued recently by the Department of Commerce. The bulletin gives the production of wheat and rye in every country from 1909 to date and includes detailed information about exports and imports of both wheat and flour, for all the principal countries of the world. All of the figures have been taken from original sources and have been converted into the English equivalent of bushels and barrels respectively. This bulletin is listed as Trade Promotion Series No. 10, and is for sale by the superintendent of documents, Washington, D. C., at 40 cents per copy.

* * *

After commenting on the difficulties of obtaining reliable crop statistics in Russia, and the uncertainty of facts due to lack of standard statistical methods, a Government bulletin says:

Available figures indicate that the total area of the leading crops grown in Russia (wheat, barley,

rye, oats, corn, potatoes, flax, hemp, cotton and sugar beets) is estimated for 1925 at 182, 959,000 acres, which is 73,766,000, or 40 per cent, more than the area planted to these crops in the low year of 1922 but is still 38,399,000 acres or 21 per cent below the 1909-13 average. It is interesting to note that this acreage has not decreased as much as the number of horses which, according to the preliminary estimates for 1925, is still about 25 per cent below the pre-war number. Wheat and barley, the most important of the cereal export crops, are still considerably below the 1909-13 average, while rye and potatoes, staple food crops of the peasants, show an increase.

FIELD SEEDS

(Continued from page 706)

themselves with this popular legume whose growth is increasing rapidly over wide stretches of territory or upon their state experiment stations.

Having selected the type which seems best fitted to their purpose, the essential is to secure pure seed of the highest grade.

THE TIME FOR HARD SEEDS

Elevator operators handling seed sidelines should stress the fact to their customers that hard seeds germinate best when sown at a time of the year when seeding is not a part of the regular routine, late fall, midwinter or very early spring, so that they may be exposed to the weathering of thawing and freezing. These are the conclusions advanced by Dr. David Schmidt, a research fellow of the agricultural college of the University of Wisconsin. Doctor Schmidt expounded the theories developed by the latest research work at Wisconsin, the Boyce Thompson Institute in New York and at other experiment stations before the Association of Official Seed Analysts in Kansas City recently.

Botanists have advanced a theory that the hard seed is a trick of nature to perpetuate a species, so that if the original and main germination of the seed crop is destroyed there will be hard seeded survivors to germinate at a later date.

Whatever is the cause or the reason for them, Doctor Schmidt says they are a distinct problem of agriculture and have been so for the last half century and one that has proved troublesome to the seed trade which has tried scarification, roughing the seeds, and other means to increase their germinating power.

The troublesome hard seed problem is slowly nearing a solution due to the work of experiment stations and seed houses. New scarifying machinery to penetrate the hard shell of these peculiarly formed seeds is constantly being invented and new types have been installed this year for the treatment of this class of seeds.

WHEN RETAIL SALES OF FIELD SEEDS ARE MADE

The data obtained from the report of 3,000 dealers to the United States Department of Agriculture show that 90.3 per cent of Red Clover, 91.6 per cent of Mammoth Red Clover, 89.3 per cent of Sweet Clover, 75.3 per cent of Alfalfa, and 70.3 per cent of Timothy seed sales are made by retail dealers in the spring season.

The months of spring sowing vary in different states because of climate and other factors. No provision was made for the listing of summer sales separately, as all sales not made in the spring were included in the figure for fall sales. Early summer sales may have been recorded as spring and some of the late summer ones as fall sales.

Red Clover.—The reports of 2,020 dealers indicate that 90.3 per cent of their Red Clover sales are made in the spring. The highest percentage of spring sales are for the most part from states which show the largest acreage of Red Clover including Pennsylvania, New York, Ohio, Illinois, Indiana, Iowa, Minnesota, Wisconsin, and Idaho. Fall sales are relatively more prevalent in Virginia, Tennessee, and the New England and Pacific Coast States than elsewhere.

Sales of Mammoth Red Clover follow closely those of Medium Red in respect to the localities and the relative percentage of spring and fall sales.

September and October are reported as the principal months for fall sales of Medium Red Clover seed. For spring sales, March, April and May, in that order, lead the other months. February is also reported as one of the principal months for spring sales in Ohio, Indiana, Kentucky, Illinois, Iowa, Missouri, Kansas, Arkansas, Oklahoma, and Oregon. May and April are the principal months for spring sales in New England, New York, North Dakota, Montana, California, and Washington.

Sweet Clover.—The sales of Sweet Clover reported by 1,890 dealers indicate that 89.3 per cent of the total are made in the spring. In general sales of Sweet Clover are made a little later than those of Red Clover, because April, March, and

The industrial crops such as flax, hemp, cotton and sugarbeets showed a great decrease in area during the years of the war and revolution. During the last three years, however, they have increased steadily in importance and have either nearly reached the pre-war average or as in the case of flaxseed, hempseed and fiber, considerably surpassed it. The total area devoted to the industrial crops is small compared to the grains or potatoes, so changes in the production of these crops can have had little effect on the production of food and feed crops for Russia as a whole although the local effect may have been marked.

May rank in the order named as the leading months for spring sales of Sweet Clover.

The states which sell relatively more of the total amount in the fall are Arkansas, California and Texas. These states are not large users of Sweet Clover seed while the states with the greatest Sweet Clover acreage show high percentages of spring sales. April is reported as an important month for spring sales in most sections with the exceptions of New England, where May is the important month, and of California, Arkansas, Oklahoma, and Texas where sales are made during February and March.

Alfalfa.—The reports of 1,890 dealers indicate that 75.3 per cent of the Alfalfa sales are made in the spring. The only states included in the table that indicate larger sales of Alfalfa seed in the fall are Texas and Virginia. Fall sales equal spring sales in Tennessee and are more than one-third the spring sales in Arizona, California, Kansas, Missouri, Pennsylvania and the New England States. April, March, and May, in that order, lead other months in spring sales; September and October in fall sales.

Timothy.—The reports of 1,908 dealers indicate that 70.3 per cent of their Timothy seed sales are made in the spring. But two states, Ohio and Virginia, show a higher percentage of sales in the fall than in the spring. Other states showing relatively high percentages of sales in the fall are Missouri, Kentucky, Indiana, Illinois, Tennessee, Pennsylvania, and the New England States. September and October are the principal months for fall sales.

For spring sales, April, March, May and February, in order named, lead the other months. February is reported as one of the principal months for spring sales in Illinois, Indiana, Kentucky, Iowa, and Missouri, while May is one of the principal months in New England and most of the northern states.

Eighty-five per cent or more of the total sales in the Dakotas, Minnesota, Wisconsin, Nebraska, Utah, Colorado, Idaho and Montana are made in the spring.

URUGUAY RUNS SEED BUSINESS

The Republic of Uruguay maintains an official Seed Commission, as a means to the end of giving all possible aid to the small but prosperous agricultural industry of the nation. In Montevideo, the capital city, seeds are gathered by agents of the commission and cleaned thoroughly before they are dispensed. The commission also regularly dispatches to outlying points a railway car equipped to do free cleaning of certain seeds, according to a report received from O. Gaylord Marsh, American Consul, Montevideo.

This service is very popular and many farmers take advantage of the facilities offered by this "seed selection car" and up to May 31, 1925, the following orders were received and filled by the commission in Montevideo for seasonal seedings: 787 orders for seed wheat to the amount of 27,000 bushels, 83 orders for oats to the amount of 4,000 bushels, 102 orders for linseed to the amount of 2,000 bushels, and 43 orders for Alfalfa seed to the amount of three tons.

SUNFLOWER SEED POPULARITY GROWS

Seedsmen in many districts now are stocking the principal commercial types of sunflower seed. It is becoming known as a profitable crop on account of the seed market and also because of the new sunflower silage. In fact, the sunflower bids fair to become a regular farm crop in the light of experiments conducted by the Ontario Agricultural college in Canada and various state stations. It has there been used successfully both as a silage crop and for its seed as feed and for their oil. Southern Illinois joined the sunflower procession when its corn crop failed and there have been favorable reports on the sunflower crop from that section. The Ontario Agricultural College report says:

"The average results of the analyses of the sunflower compare very favorably with those of corn, being particularly rich in protein and fat."

The Montana station reports: "When digestible

nutrients, yield per acre, drought, and frost-resisting qualities of the sunflower are compared with corn, it is readily seen that sunflowers have a distinct advantage over corn for silage purposes in the higher mountain valleys of the West or in other sections of the United States or Canada with similar climatic conditions."

The station at Alberta, Canada, reports: "From our experiments we are quite in favor of the use of sunflowers for silage."

British Columbia reports: "All the animals take to the sunflower silage quite readily and their flow of milk is normal and absolutely satisfactory."

Oregon reports that sunflowers make good silage but are not the equal of corn. Pennsylvania says that the milk flow is not as well maintained on sunflowers as on corn. New Hampshire says the cows did not relish sunflower silage at first but took to it readily a little later. West Virginia reports sunflower silage as a success. Colorado station says its herd went through the winter on sunflower silage as well as on corn silage.

WESTERN SEED DEALERS ORGANIZE

The California Seed Dealers & Growers Association has changed its name to the Pacific Coast Seedmen's Association, and a new constitution and by-laws adopted. The membership of the association now includes California, Oregon, Washington, Idaho, Utah, Nevada and Arizona.

The first meeting will be held on April 15 at Del Monte, Calif., and thereafter semi-annually at other cities.

Officers for the coming year are: Dr. E. C. Pieper, manager Braslan Seed Growers Company, Inc., San Jose, president; W. B. Early, Aggeler & Musser Seed Company, Los Angeles, vice-president; F. W. Nelson, Portland Seed Company, Portland, secretary-treasurer; Lester L. Morse, C. C. Morse & Co., San Francisco, and L. D. Waller, of Waller-Franklin Seed Company, Guadalupe, Calif., are directors.

NEW SEED TRADEMARK

The following new seed trademark was recently published in the *Official Gazette* of the United

HYGRADE SEED CO.

States Patent Office: "Hygrade Seed Co." flower, vegetable, lawn and field seeds. G. E. Hofmeister, doing business as Hygrade Seed Company, Tuckahoe, N. Y. Filed February 16, 1926. Serial No. 227,351. (Not subject to opposition.)

"SEED LAWYER" BROADCASTS

Walter C. Pfaender, seed expert recently gave a radio talk on state seed laws from Station WGN, Chicago, on a program of the National Farm Radio Council. Most of the seed laws have been modeled upon the so-called "Uniform State Seed Law," explained Mr. Pfaender. The main provisions of it are as follows:

Every bag or package of agricultural seeds (grasses, clovers, grains, etc.) offered for sale, must have a tag or label on which is shown:

1. The common name of the seed.
2. The purity of the seed, expressed as a percentage of the total weight. For example: Out of 100 pounds of timothy seed marked 98 per cent pure, 98 pounds would be pure timothy and the other two pounds would be chaff, dirt, weed seeds or seeds of some other crop.
3. The germination or vitality of the seed. This is expressed as a per cent; 92 per cent, for example, meaning that 92 out of 100 pure seeds in the sample tested were alive and capable of sprouting.
4. The date on which the germination test was made.
5. The quality of weed seeds, expressed as a percentage of the weight. This includes the seeds of all plants that are not strictly farm crops. Some are harmless but others are decidedly harmful.
6. The name and approximate number per ounce, or sometimes per pound, of noxious weed seeds present in quantity according to state regulations. The noxious weeds are only those certain kinds specified in the law, usually including such weeds as dodder, Canada thistle, etc. Each state has its own list; weeds considered noxious in one state may be considered comparatively harmless in another. It is not so very generally known that for many years White Blossom Sweet clover was listed as a noxious weed in several states. In some states seed containing even a trace of certain noxious weeds may not be sold at all.
7. The name and address of the seller.

The law does not prevent the sale of poor seeds from elevators or other seed distributing agencies, providing they are correctly labeled. A dealer may

sell seeds only 60 per cent pure and rating only 50 per cent in germination if he tags them accordingly. The speaker called attention to this point as a warning to buyers.

ARE THERE SEED TRADE SECRETS?

So great is the competition among seedsmen to offer the highest grade of seed for sale that a new mechanical industry has risen up in the last few years with complicated machinery, much of it based on the separation of the various sizes of shot by gravity. So cautious are some of the seed merchants that they seem to guard their machinery and its operations with extreme care. It is commonly known, however, that in addition to fanning mills, an elaborate series of screens is used which will not permit the grain or seed to be cleaned to pass through but which allows the finer weed seeds to drop out. Coarser screens will let the seed pass through and hold the coarser weed seeds.

Seeds of approximately the same size as the seed to be cleaned are removed by gravity, pouring the seed from one level to another, the heavier foreign seeds dropping out while the cleaned grain goes on to its container. The seed is cleaned and then re-cleaned several times. This seed cleaning machine is complicated and delicate and does its work rapidly and accurately. But there are no special secrets.

THE HARD SEED PROBLEM

By DAVID SCHMIDT*

Hard seeds, by which is meant those having seed coats that are for a time quite impermeable to moisture necessary for germination, have been recognized during the past half century as a distinct problem in the valuation of germination tests.

The origin of this impermeability and the true cause of it, whether chemical or physical, have not, as yet, been definitely determined. It has been suggested that variations in climate as well as variations in moisture, temperature and soil during the growth of the crop and particularly during the period when the seed is reaching maturity may influence the amount and the degree of hardness in the seed coat. Also, that this so-called hardness may actually be due to a hardness or compactness of the seed coat, to an unusual thickening of the cell walls, or a deposition of some gelatinous or some waxy material in a layer through which water cannot penetrate.

The actual germination of the hard seed, whether in the regular germinating chamber or under field conditions, has been frequently tested, too often inadequately, and with many contradictory results. In general, the early results indicate that the seeds of Alfalfa do not withstand freezing weather very well, but if planted in the late spring or in mid-summer, many of the hard seeds will germinate during the first season and will be of value to the crop. Some of the hard seeds of Red Clover, but very few of the hard seeds of Alsike, White Clover and White Sweet Clover, when sown in late spring after warm weather sets in, will be of value to the crop. If sown so that they are subjected to freezing and thawing, close to one-half of the hard seeds of these kinds will be capable of germination in the spring.

According to the results of a recent investigation in Sweden the value of the hard seed seems very doubtful. Better germination occurred in the lighter soils, Alfalfa germinating well the first season, but the percentage in Red Clover and Alsike was very low. The second season about half the hard seeds in Red Clover and Alsike germinated, but where planted with Timothy the young seedlings were unable to meet the competition, and most of them died.

The present study of this problem, established under the National Research Council, is financed by the Wholesale Grass Seed Dealers Association, principally, the American Seed Trade Association and other interested parties contributing. It is an attempt to make the investigation include regional, climatic, seasonal and soil differences as they may affect the germination of hard seeds in Sweet Clovers, White Clover, Alsike, Red Clover and Alfalfa, and to make the result as conclusive as possible.

Of several factors which may cause much trouble in the ultimate solution of the entire problem the most difficult to control, perhaps, and the one which

*This paper was read by Dr. Schmidt, who is a research fellow at the Wisconsin Agricultural College, Madison, Wis., before the Association of Official Seed Analysts at Kansas City, December 30, 1925.

may have caused more contrary results, is the variation in hardness among the different seeds. As a rule, the numbers of hard seeds are highest in the Sweet Clovers, ranging down through White Clover, Alsike, Red Clover and Alfalfa. Again there is a range in the degree of hardness between the seeds of different kinds, this range being practically parallel to the range in numbers. But the widest differences and those which are least anticipated, may appear in different lots of the same kind; difference in numbers, difference in degree of hardness and a difference in response to conditions which are apparently the same.

After a number of experiments in the greenhouse, in different storage conditions, different treatments, methods of seeding and substrata in germination tests, it seems that we may expect a variation in the germinative response of hard seeds when exposed to differences and changes in the season of the year, soils, moisture, temperature, aeration, humidity and light. Unfortunately, the only check we have against these variations in the field is the standard blotter test. The blotter test seems to be a good indication of what we may expect in the field if the seeds in the field are sown in warm weather and are not subjected to wide variations in temperature and moisture.

Aside from the work at Madison, cooperative tests are being made at the Boyce Thompson Institute, Yonkers, N. Y., at Spooner, Wis., Bozeman, Mont., and Arlington and Yorktown, Va. The results of field trials now indicate that if the seeds are sown in the late fall, mid-winter, or very early spring and are exposed to freezing and thawing for considerable time the germination of the hard seeds of Alfalfa is very slight, while we may expect germination of about 40 or 45 per cent of the hard seeds of Sweet Clover and only about 15 or 20 per cent of those of Red Clover, White Clover and Alsike. If sown just after the frost has left the soil, most of the hard seeds of Alfalfa will germinate, while only about 10 or 15 per cent of those of Red Clover, White Clover, Alsike and Sweet Clover will germinate during the first season. When sown in late spring or mid-summer the germination of hard seeds is very low.

Thus, it seems, we may expect the best results from the hard seeds if they are sown at times of the year when seeding is not commonly practiced, if at all. If the seeds are sown in spring, or after the soil becomes workable, as is usually the case, the germination of hard seeds is very slight and of little agricultural value.

But we must always keep in mind the very evident possibility that the present indications of the results at hand may be, and, no doubt, are, influenced by one or more of the many factors involved. Climate, soil, weather, temperature, moisture time of seeding and the nature of the seed itself—each has its own peculiar influence and the hurried interpretation of any data may suffer from the misjudgment of the effect of the environment.

Mitchell West of Earl, Ark., has opened a new seed store and is operating it under his own name.

Northrup, King & Co., seed and feed dealers of Minneapolis, Minn., have increased their capital stock to \$1,500,000.

W. L. Griffin has bought the interest of R. H. Griffin in the firm of Griffin Bros., seed merchants of Lankershim, Calif.

The Morton & Hathaway Seed Company has been incorporated at Okmulgee, Okla., by Walter W. Morton and Fred Hathaway.

H. J. McKnight has changed the name of his seed business at Neosho, Mo., to the Neosho Seed Company. The business was established in 1889.

A full line of field, vegetable and flower seeds, is being handled by S. H. Blackburn & Son at Pikeville, Tenn. The company also operates a feed business.

The Ohio Seed & Products Company of London, Ohio, will continue to operate under a receivership for a time. Dr. J. C. Hunt and R. H. Schryver are the receivers.

Wilfred Olson of Salt Lake has announced the sale of the Filer Seed Company's warehouse at Filer, Idaho, to the Southern Idaho Grocery Company of Twin Falls.

A new garage and storage shed is being built for the Fredonia Seed Company of Fredonia, N. Y., to take care of its salesmen's card which have grown to exceed 40 in number.

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Grain and Seeds

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Two cars 1925 crop Unhulled Red Top. Ask for samples and prices. PURCELL SEED COMPANY, Evansville, Ind.

FOR SALE

High quality Broom Corn Seed grown from our select seed on our Seed Farms. Ask for samples. C. W. HARRIS SEED COMPANY, Mattoon, Ill.

FOR SALE

Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator belts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, 501 Waldheim Building, Kansas City, Mo.

TENNESSEE CULTIVATED MILLET

For Sale—Car Lots Only
Ask for Samples and Price
CHERRY-MOSS GRAIN CO.
Union City, Tennessee

For Sale

MACHINERY**MACHINES WANTED**

Used lifting jacks for moving form construction. Must be in good condition. STEVENS ENGINEERING & CONSTRUCTION CO., Buder Bldg., St. Louis, Mo.

WIL SELL ONE OR ALL

Six Fairbanks' Hopper Scales, 1,600 bushels, with type registering beam, good as new. They are coming out of grain elevators we are now dismantling for the Santa Fe Ry. Co., Argentine, Kan. Will guarantee same to be complete and in good working order. J. GOLDBERG & SONS STRUCTURAL STEEL CO., 800 E. 18th St., Kansas City, Mo.

ELEVATORS AND MILLS**FOR SALE IN NORTHERN ILLINOIS**

Several grain elevators at small stations. Also handling lumber, coal and other side lines. HOLCOMB-DUTTON LUMBER COMPANY, Sycamore, Ill.

A REAL BARGAIN

South Dakota elevator for sale. Electrically equipped; first-class condition. Ample territory in good grain belt. F. A. KOHLHOFF, Stratford, S. D.

FOR SALE OR LONG TERM LEASE

Good grain elevator; electric power; also long established coal and feed business. Heart of Kansas wheat belt. Bumper crop. JOHN BAUER, Burdett, Kan.

FOR SALE CHEAP FOR CASH

Six-hundred-barrel flour mill in excellent condition; grain warehouses and elevators and going business. Very favorable outlook at present, and a possibility to net a return of the investment the first season. GUY PURDY, 724 Realty Building, Spokane, Wash.

MILLING IN TRANSIT FEED MILL FOR SALE

Empire Mills at Olean, N. Y. Storage capacity, 65,000 bushels bulk grain; 21,800-foot warehouse room for sacked goods. All machinery for feed. Manufacture no flour. Private switch with track scale. Bargain for some one. FELT BROS. & GAGE CO., Olean, N. Y.

Miscellaneous Notices

WANTED

Partner—too much for one man. Will accept part trade. This will stand inspection. HAWARDEN ROLLER MILLS AND ELEVATOR, Hawarden, Iowa.

FOR SALE

Central Minnesota electrified waterpower, including eight-year contract of current to the city where property is located; also mill building, dam flowage rights. Have transit on feed, and up-to-date feed mill running every day. Satisfactory reasons for selling. MINNESOTA, Box 5, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield Ohio.

TIME PAYMENTS ALLOWED

On the Boss Air Blast Combination Cleaner and Car Loader. Equipped with motors, if needed. Loads cars without scooping. Boosts grades. Quickly pay for themselves. MAROA MANUFACTURING COMPANY, Maroa, Ill.

Land Opportunities

TEXAS ACREAGE

Ranch 10,000 acres; \$100,000 improvements. Railroad and state highway run through land. \$26.50 acre. Rio Grande Valley, 77,000 acres, only \$8.50 per acre, owner's price. A wonderful bargain. No trouble to show ranch. Inspection invited. F. DeLOACH, Donna, Texas.

FLORIDA ACREAGE

We have farms, orange groves and acreage in small and large tracts in all sections of Florida. Handle only such as we can deliver.

SHERRILL REALTY COMPANY
214 Lutz Realty Bldg. Jacksonville, Fla.

TEXAS LAND

Twenty-seven thousand three hundred acres, Dimmit County, 90 per cent tillable, adjoining the Catrina or Taft Ranch, now being subdivided. Our price to settle an estate, \$7.50. REQUA-REDUS LAND CO., 316 N. St. Marys St., San Antonio, Texas.

FOR SALE

Virgin lands located in St. Lucie County in sections known as the Indian River Sections, suitable for Oranges, Grapefruit, Potatoes, Beans, Celery and Cabbage. All well drained; close to good highways. Price on application. J. G. COATS, Fort Pierce, Fla.

FLORIDA ACREAGE

For Sale—6,000 acres in the vicinity of Jacksonville at \$9.50 per acre; good farming land. Cut this into 10-acre tracts and make money. Also 28,000 acres Liberty County at \$6.50 per acre. Ask your banker about us.

WEYMAN MORTGAGE COMPANY,
Real Estate Department,
816 Florida National Bank Bldg.,
Jacksonville, Fla.

94,000-ACRE CATTLE RANCH

Having obtained through foreclosure, I offer the greatest ranching opportunity in the West: 94,000 acres choicest improved ranch, located on Powder River, Montana.

Two sets fine ranch buildings, 150 miles fence, Artesian wells and springs. Several thousand acres choice irrigable bottom land. For complete description, address owner,

JEROME J. JONES,
146 E. Gorham, Madison, Wis.

FOR SALE

Two beautiful country homes in North Florida and New England. Florida estate has 8 acres, fine grounds, lawns, shrubs, plums, pecans, pears, grapes, Japanese persimmons, many shade trees, 11 hydrants, corner location, charming southern bungalow, 6 rooms, porches, one 8x30, screened, French windows, hot water heater, bathroom complete, fine sink, 2 pantries, electric lights with pretty fixtures, 3 open fireplaces, garage, servant's room, 2 poultry houses; location on ridge, just off brick highway, in beautiful river town with noted health spring, east coast section; price \$15,000; New England estate, 25 miles north of Boston, half minute from electric and town square; fine, high, corner location, 3 acres; fine assortment early and late fruit trees, shrubs, flowers, berries; house 2 stories, 6 rooms, large, sunny, beside 2 room attic, 2 halls, back entry, large pantry, bathroom complete, steam heat, electric lights, telephone, hot and cold water, 2 sinks; very large barn with upstairs and basement; cement walks, evergreen hedges; "health" town with fine water supply; price \$10,000. Apply S., 283½ N. Bellevue Blvd., Memphis, Tenn.

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Fifty-two Years of Service in the Grain Trade

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CHICAGO**Armour Grain Company**

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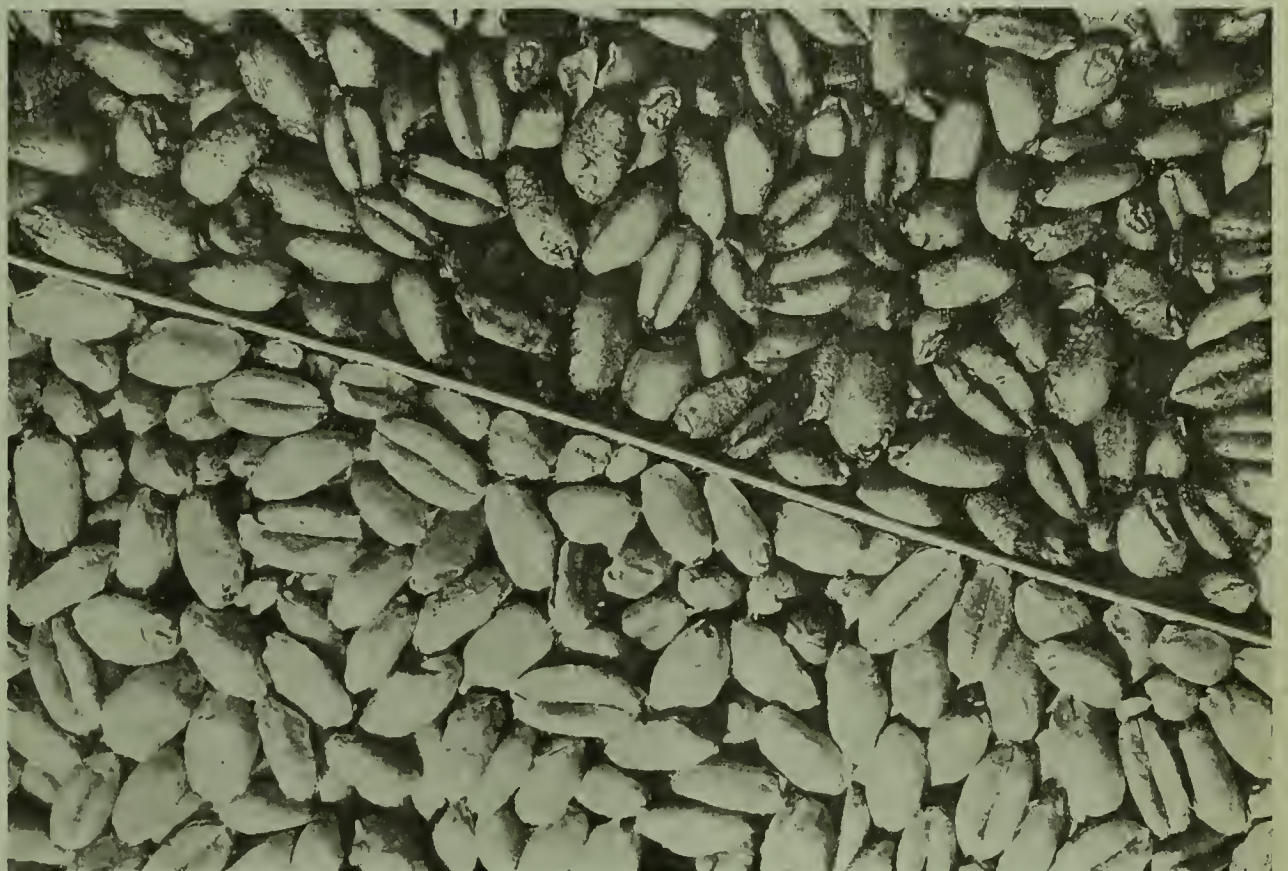
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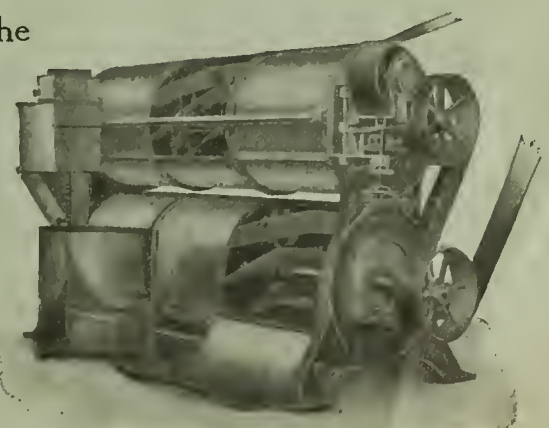
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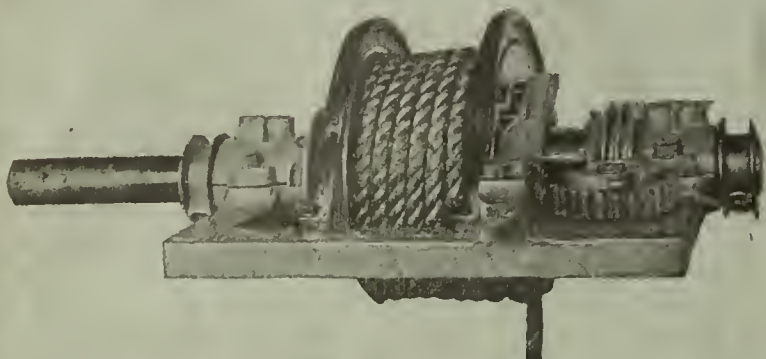
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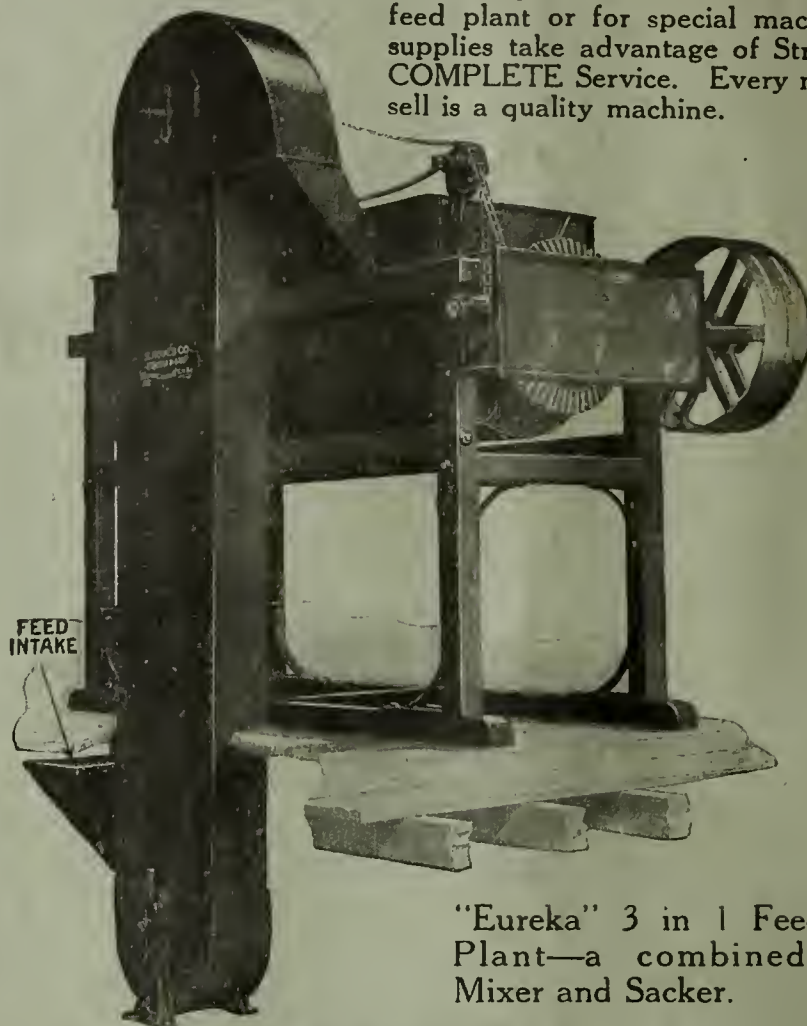
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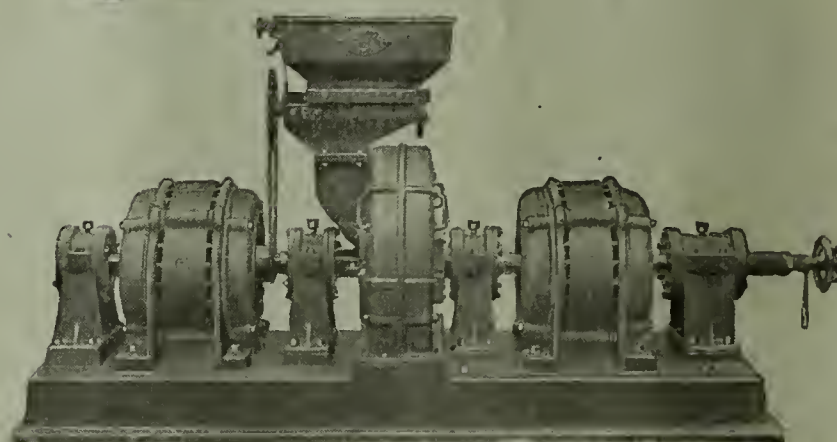
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